



सत्यमेव जयते

Govt. of Maharashtra
Public Works Department

**State Schedule
of Rate**

2020-21



For State of Maharashtra
(w.e.f. 01/10/2020)

Preface

Govt. of Maharashtra, Public works Department is glad to

Thr S.S.R. shall be effective from 1 October 2020. In 2019-20 S.S.R. all

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STATE SCHEDULE RATE FOR YEAR 2020-21

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1 Important issues for State Schedule of Rates

Section A - General Notes

- i) Schedule of Rates prepared for the year 2020-21 is operative from 01 October, 2020 and is applicable for all the Districts of Maharashtra. Schedule of Rates are worked out considering the rates of materials prevailing in all districts. If the basic rates of murum, sand, metal and bricks for a particular district deviates from the rates considered in the SSR, then the Superintending Engineer, PWD of that particular district may change rate/s for that particular item/s. While doing so concerned Superintending Engineer, PWD shall keep the reasons in writing on record.
- ii) For the rates in Corporation area, Municipal Council Areas, Notified Tribal area, Hilly inaccessible areas & Central Jail premises, Sugarcane factory area, Tiger Project areas, Coal / Manganese /Lime Mining area, Naxalite affected area and Mental Hospital premises & Pandemic Special Centers, an increase of percentages over the normal schedule of rates (Basic completed item Rates) prescribed for the year 2020-21 are as follows:-

	Specific Areas	Percentage in Rates
a)	Corporation Areas	5%
b)	Municipal Council Areas	4%
c)	Sugarcane factory area (within 10 km. radius)	5%
d)	Notified Tribal Areas / Hilly Area / Inaccessible areas	10%
e)	Inside Premises of Central Jail, Mental Hospital, Raj Bhavan, Yerawada Printing press.	15%
f)	Tiger project area in Amaravati, Yavatmal, Wardha, Nagpur, Bhandara, Gondia & Chandrapur Distt.	20%
g)	Coal / Lime / Manganese Mining area	5%
h)	Naxalite affected area	20%
i)	Metropolitan areas notified by UDD excluding Municipal Corporation and Council areas	2%

In addition to this, for items involving construction and repair of sewer lines/ storm water drains, concerned Superintending Engineer, PWD shall increase the rate accordingly

Issue rates of Schedule 'A' materials for above notified area shall be increased by respective percentage. The above percentage shall be applied on the cost of items after deducting the cost of Specified materials, if issued on Schedule 'A'.

The Superintending Engineers (PWD) shall Specify the Sugar factory areas/ Coal mine areas/ Notified Tribal areas under their circles.

The Notified Hilly / Inaccessible areas shall be considered as per Government Resolution, Planning Department No. DVK-2009/CR-6/D-1483 Dated 18.01.2010 & 31.01.2018, No. DVK-2015/CR-42/D-1481A Dated 15.06.2018 & 20.11.2018 and DVK-2015/CR-35/D-1483 Dated 31.07.2015 and applicable GRs of Planning Department.

The Superintending Engineer, PWD shall decide necessary increase in ii(a) above if required for traffic restriction hours and Labour rates for night working.

1) For all district excluding Gadchiroli, following instructions are applicable:-

The works which are pertaining to inside premises of central jail, Mental Hospital, Raj Bhavan, Yerawada Printing press as well as in Corporation area, an increase of percentage over normal scheduled rates shall be considered both simultaneously e. g. If central jail is situated in corporation area an increase of 5% for corporation area and 15% for jail premises total 20% shall be considered.

2) For Gadchiroli District Notified Tribal area, Hilly or inaccessible area, an increase shall be (10%+20%)=30%.

iii) Schedule of rates is based on the following basic rates of materials: -

The basic rates for materials Cement, Steel, Sand, Bricks may vary from district to district. While preparing the item rates for State Schedule of Rates, the basic rates from all Districts are considered at an average level.

Sr. No.	Material	Basic rate for 2020-21(Excluding GST)
1	Cement /PPC	Rs. 5,500/- Per M. T.
2	PSC	Rs. 5,020/- Per M. T.
3	GGBS (IS-16714)	Rs. 4,160/- Per M. T.
4	TMT-FE-500 reinforcement	Rs. 42,600/- Per M. T.
5	HCRM/ CRS reinforcement	Rs. 46,500/- Per M. T.
6	Structural Steel	Rs. 44,100/- Per M. T.
7	Tubular Steel	Rs. 49,500/- Per M. T.
8	Bitumen VG-30 (Packed)	Rs. 31,730/- Per M. T.Ex. Refinery Mumbai
9	Bitumen VG-10 (Packed)	Rs. 30,930/- Per M. T. Ex. Refinery Mumbai
10	Bitumen VG-40 (Bulk)	Rs. 28,180/- Per M. T. Ex. Refinery Mumbai
11	Bitumen VG-30 (Bulk)	Rs. 26,630/- Per M. T. Ex. Refinery Mumbai
12	Bitumen VG-10 (Bulk)	Rs. 26,430/- Per M. T. Ex. Refinery Mumbai
13	Bitumen VG-40 (Packed)	Rs. 34,580/- Per M. T. Ex. Refinery Mumbai
14	Bitumen Emulsion	Rs. 24,245/- Per M. T. Ex. Refinery Mumbai
15	CRMB - 55	Rs. 29,350/- Per M. T.
16	CRMB - 60	Rs. 30,400/- Per M. T.

The Rates of Bitumen given above are basic rates as on 16 July 2020. While preparing estimates, the rates prevailing at that time of Ex-Refinery Mumbai, shall be considered. The Rates of Steel given above are as per SAIL Dtd. July 2020 & rates of Cement are of Dtd. July 2020.

The Portland Pozzolana Cement (PPC) & Portland Slag Cement (PSC) shall be of reputed manufacturer only.

While preparing estimates if any specific grade of structural steel other than the SSR and grade of Bitumen other than SSR is required, then Superintending Engineer, PWD shall be competent to incorporate the same in the detailed estimate.

If the contractor procures Bitumen/Tar/Emulsion from any source other than Govt. refinery as permitted by Govt. vide Circular No. संकीर्ण-२०१८/प्र.क्र.३०/यं.बा.सा. दिनांक २७ मार्च २०१९, the Executive Engineer concerned, on requisite testing of such material shall work out the variation between the prevailing Govt. refinery rate and rate of private refinery produced by contractor on date of purchase of such material. If the variation is found negative, it shall be deducted from the amount payable to contractor against relevant items. If the variation is positive, the contractor shall not be paid for such positive variation and all the extra cost shall be borne by the contractor.

Labour rates are provided and certified by labour commissioner, Nagpur.

Machinery hire charges rates are provided by Mechanical wing of PWD.

iv) Taxes and Govt. Circulars.

- a) Material Rates are exclusive of GST (Goods & Service Tax). Rates for completed items are also exclusive of GST. While preparing the estimates, separate provision for GST shall be made in recapitulation sheet.
- b) As per Govt. Circular No.SSR - 1090/CR-6453/PLN-3 Dt. 14.07.1993 and as per GR of Industries and power Department No. BCA-2009/CR-108/Labour 7-A dated 17.06.2010, Labour Cess at 1% has been considered separately in Rate Abstracts.
- c) For labour amenities and all other overhead charges, 10% provision is considered in Rate Abstract. In addition, 10% provision for Contractor's Profit is also considered separately.
- v) The Government of Maharashtra, Revenue and Forest Departments Gazette No. 67 Dt. 15 May 2015, States that the Royalty charges of Rs. 400/- Per Brass (i.e. Rs.141.34 /cum.) are to be considered. The surcharge levied on Royalty shall also be payable to the contractor in following manner . Royalty charges on all minor minerals do not form part of Rate Abstract and shall be reimbursed separately on production of proof to that effect. The Superintending Engineer, PWD may modify and circulate Royalty charges in case of any modification are made by Govt. of Maharashtra. Royalty charges against estimated quantity shall be included in Recapitulation sheet.
 - a) For sand = Royalty + surcharge (2%) + Distt. Mineral Foundation Cess (10%)
= 141.34 + 2.82 + 14.13 = 158.29 Per Cum
 - b) For All Other Minerals = Royalty + surcharge (2%)
= 141.34 + 2.82 = 144.16 per cum
- vi) For crusher metal separate royalty charges shall not be considered as it is a finished product.
- vii) In water scarcity area (the locality declared as drought prone area by District Collector for specified period), the Superintending Engineer, PWD concerned shall suitably increase the rate for particular item considering the requirement of water for that item.
- viii) **Leads and lifts**
 - a) Rates For transportation of material by Truck from different leads have been worked out as per table given by National Building Organization. The cost per trip shown in statement 'C', also includes charges of running empty vehicle for return trip. For calculation of transportation charges rates tabulated in material master for following items are considered in the formula
 - a) Mazdoor b) Diesel c) Mobile Oil d) Truck
 - b) For calculation of pay load factor a truck of 10 M. T. capacity is considered.
 - c) The rates worked out in the Rate Abstract include initial lead of 50 m. for all completed items. Actual lead charges are to be added for items while framing the estimate wherever applicable.
 - d) Lead charges for various materials are given in statement C-1 and these are inclusive of loading and unloading charges. Hence loading and unloading charges shall not be considered separately.
 - e) The Basic rates for all quarrying materials such as Rubble, boulders, aggregates, sand, murum, selected earth etc. are taken as rates at quarry with lead of 50 mtr. (Head load lead is not to be deducted from lead)

ix) Hot-Mix Hot laid Bituminous Works:-

- a) The rates of Bitumen VG-40, Bitumen VG-30, and Bitumen VG-10 grade bitumen are Separate. Hence specify the grade accordingly in items of work to be executed.
- b) References of PWD Standard Specifications, MORTH specifications are mentioned in bracket below the description of the items.

x) The concrete works :-

The rates of cement concrete item are based on Standard consumption. The mix design shall be carried out for Concrete Grade above M-20 grade. If the consumption as per approved mix design varies (more or less 5%) from standard consumption, accordingly the positive difference in the cost of cement shall not be paid to contractor.

xi) Work in Severe / Adverse / Foul Condition :

- a) For such work, the rate for excavation shall be increased by 25% over the scheduled rates of excavation.
- b) For other items required to be executed in foul condition up to Ground Level / Bed Level, the rate shall be increased by 5% over schedule rates of individual items of CSR. This increase is over and above under general note 2.
- c) The above hike in rates of (a) & (b) shall be subject to the express condition that the prior approval of Superintending Engineer, PWD is obtained. The foul condition shall be certified by the Executive Engineer.

xii) General Guidelines :-

- a) The contents of SSR Annexure are as follows :- Statement A-1 - Material Master. (Basic rates of materials) Statement A-2 - Labour Master.
- b) References of PWD Standard Specification/ MORT & H Specification are mentioned in schedule of rates.
- c) In case of sudden rush of works like Kumbhmela at Nasik, Guru-ta-Gaddi at Nanded, Asian games at Pune, the Department may face shortage of material and other resources. In such situation the concerned Superintending Engineer, PWD shall prepare the new Schedule of Rates or make necessary amendment/s in SSR with the prior permission of the respective Chief Engineer, PWD.
- d) For works in Gadchiroli, Ratnagiri, Sindhudurg districts specific District Schedule of Rates shall be prepared by respective SE.
- e) The testing facilities, for construction materials, which are not available in Government Laboratories/ Institutions, test results can be obtained from ISO Certified and NABL Accredited private quality control Laboratories / Govt. approved Engineering colleges, Polytechnic.
- f) Use of Geo textiles, for strengthening the soil is work of special techniques requiring precise use of materials and skilled supervision. Use of Geo textiles in soil stabilization may be included in estimate only after the prior permission of the Chief Engineer concerned.
- g) As far as possible, use of Cold mix items shall be discouraged. However, if found necessary, Rate Analysis for cold mix item with seal coat shall be approved by the Superintending Engineer, PWD of that particular Circle.
- h) Superintending Engineer, PWD shall decide reduced task rates for Items required for diversion, wherever diversion is required.
- i) The rates of Material, Labour and Machinery are same for all over state, however if any changes at local level, it shall be approved by the Superintending Engineer, PWD of that particular Circle.

Section B - Instructions for preparing estimate

- i) A** As per revised circular issued by Dy. Directorate of Insurance Maharashtra State vide letter No. क्र. प्रविनी - 2314/ देयक कपात रक्कम/ संकीर्ण/ अभि-3, दिनांक 31/03/2015, Insurance towards labour is not considered in rate abstract of SSR items. Provision for the same shall be made in the recapitulation sheet as follows.

a)	Work value upto :- 25.00 Lakhs	1.00%
b)	Work value above :- 25.00 Lakhs	0.50%

- i) B** The Contractor shall insure Project / Work facility for entire period of contract including all assets existing on the date of award of work and any subsequent assets created during construction and maintenance period and shall stand covered under this insurance coverage. The Contractor shall submit the insurance document within 7 working days from the date of work commencement order. This insurance premium shall stand reimbursable in the 1st RA bill. The amount for premium of such insurance shall be as per GIS (General Insurance Scheme) norms of Govt. of India. Such insurance, since reimbursable, is not considered in rate abstract of SSR items, the amount of assets premium shall be considered as 1% per Annum for total period of construction in recapitulation sheet while framing the estimate.

- ii)** For items of buildings having ground plus upper floors rate shall be increased as follows for the floor lift.

Sr.No.	Floor	For Every Floor Separate Item
		Rate to be increased by 1%
a)	Ground floor	Nil
b)	First floor	1%
c)	Second floor	2%
d)	Third floor	3%
e)	Fourth floor	4%

Above fourth floor the percentage increase in Rates floor wise shall be decided by concerned SE, PWD.

Note : The lift height for floor to floor shall be considered as 3.8 Mtr.

iii) Transportation Charges:-

- a) The transportation charges beyond 30 km to 50 km are with 5 km interval, 50 km to 100 km with 10 km interval, 100 km to 200 km with 25 km interval. The transportation charges for intermediate km. within the range shall be worked out by linearly interpolating between rates of the lower and upper values in the range.
- b) Statement C2 is for loading, unloading and stacking charges. Loading and unloading charges are to be deducted from Transportation charges in Statement C1, wherever transportation charges without loading and unloading are required.
- c) Rate of transportation of bulk bitumen from refinery to the plant site is Rs. 8.00 / M.T./ km. Rate of heating and decanning bulk bitumen is Rs. 110.00 / M.T.
- d) While framing the estimates, for transportation of bitumen and RCC hume pipe, Toll charges payable at various Toll palzas shall be considered under a separate item. The rate shall be adopted as per NHAI/ MORTH toll policy. The rate per kilometre shall be adopted for this shall be payable to contractor on submission of Toll receipt at various Toll plazas by shortest route.
- e) As per the directives issued by the Hon'ble Supreme Court, vehicles of category B. S. - 6 shall be only allowed to be manufactured from 1 st April 2020. However the number of vehicles plying on Indian Roads of B. S. - 6 Category are very sparse. Hence the rates of transportation of B. S. - 6 vehicles are not available. Hence e-SSR for Year 2020 - 21 does not include transportation rates of B. S. - 6 Category of vehicles.

- iv) The items for which rates are not included in state schedule of Rates, the rates shall be approved by concerned superintending Engineer, PWD.**
- v) The rates for items pertaining to Parks & Gardens shall be taken from the SSR of Parks & Gardens wing of PWD.**
- vi) For items of excavation, foundation concrete and masonry etc. for C. D. works, rates shall be adopted from corresponding items under respective building sections.**
- vii) Rates for items of excavation are worked out by considering the excavation using machineries. But where site is inaccessible for machinery then rates for manual excavation shall be taken with prior permission of the Superintending Engineer, concerned.**
- viii) For scaffolding work required to be erected for carrying out repairing work on external faces of building at various heights (viz. Repairs to chajja, external plastering, painting etc.). The rate of respective item shall be increased by 1%, provided the work is carried out by erecting scaffolding. For specific cases rate analysis shall be got approved from concerned Superintending Engineer, PWD. If separate item for scaffolding is considered in estimate, then this increase shall not be applied.**
- ix) All concrete items considered in SSR are inclusive of normal curing system.**
- x) For building works costing more than Rs. 25.00 Crore, curing shall invariably be done by intelligent curing system. Separate Rate analysis approved by concerned Superintending Engineer, PWD shall be used for estimation purpose.**
- xi) For repair works considering small quantity of work nominal mix shall be used for PCC / RCC items.**
- xii) If higher Concrete grade, is required for any specific work, the rate analysis of the same shall be derived by adding difference in standard cement consumption in relevant SSR item's rate and shall be got approved from the Superintending Engineer, PWD of concerned circle.**
- xiii) For deep foundation works, if found necessary, additional deep work charges, shall be got sanctioned from the Chief Engineer of concerned region.**
- xiv) For preparation of estimates the detailed plans (Civil and Electrical) shall be finalized with consent of user department and then the detailed estimate is to be prepared and submitted for Administrative Approval.**
- xv) In respect of new buildings and bridges, type of foundation should be fixed on the basis of detailed soil investigation report and no change in foundation shall be made without study of technical and financial implications. If such change is required out of technical necessity, the approval of the competent authority, which has given administrative approval, be taken first and then only changes should be executed.**
- xvi) While preparing Estimate, if the item of dewatering is necessary in estimate, proper item must be included and verified by the Superintending Engineer of concerned District. The dewatering rates in Bridges/Building section includes post monsoon flow of river/Nallahs having general seepage of water only and does not include provision of cofferdam, caging etc. In specific condition, if cofferdam/caging/dewatering using mechanical pumps is felt necessary then appropriate dewatering item from SSR shall be taken or separate rate analysis shall be prepared and got approved from concerned Superintending Engineer, PWD.**
- xvii) While preparing Estimate, actual and practical distance of worksite from quarries shall be taken and adequate quantity of good quality material shall be ascertained by concerned Executive Engineer. Extra care shall be taken in case of lead of murum and sand.**
- xviii) Provision shall be made for taking Photographs, Video Shooting, load testing etc. separately in detail estimate and shall form part of Schedule B .**
- xix) The use of Power Roller shall not be encouraged.**
- xx) For building works for the excavation beyond 3.0 metre depth, following increase in basic rate of an item shall be made:-**
 - a) 3.0 m to 4.50 m depth add 20 %
 - b) 4.5 m to 6.0 m depth add 30 %
 - c) Depth beyond 6.0 m extra percent to be decided by concerned Superintending Engineer.

- xxi)** The rates of various Concrete and BT items are inclusive of SCADA. SCADA is compulsarily adopted to the various works as per Govt. circular. However where it is not possible to use/adopt SCADA due to not availability of internet network or in case of small works, Misc. works, Repair works the rate shall be deducted from basic SSR rates. The amount to be deducted for concrete items shall be Rs. 117.00 per cum and for BT item shall be Rs. 57.00 per cum and the amount shall be converted per Sqm respectively. The permission of not adopting SCADA shall be obtained from the Superintending Engineer or Chief Engineer who is the Competent Authority to accord Technical Sanction prior to execution or at the time of sanction of estimate as the case may be.
- xxii)** For RCC / PQC items involving modified type of curing, the basic rate of such items shall be increased by 5% to consider cost of curing compound.
- xxiii)** For built up drain, the basic rate of item shall be increased as mentioned for foul conditions (i.e. Point No. (x) Page No. 4 of this general note)
- xxiv)** The DPR and estimate must certify on quarry chart that
- a) Quarries selected have sufficient quantity of required of specific quality needed.
 - b) That shortest lead has been considered while preparing the estimates.
- xxv)** For murum & earth, lead from nearby farms / private lands shall not be taken. It should be taken from approved quarries only.
- xxvi)** The rates of sand shall be average of the sand sale rates of last five years obtained from respective District Collector. Also the rates of items shall be in two parts i.e. 1) small works requiring sand upto 10Cum & 2) works requiring sand more than 10 Cum.
- xxvii)** Manufactured sand/ Crushed sand shall be used for work if natural sand is not available. However, in such cases the job mix design shall be get done before use wherever required.
- xxviii)** New items included in last year SSR shall be encouraged & used on pilot basis.

Section C - Testing of Materials

- i) Laboratory testing charges are not considered in the Rate Abstracts. Wherever required separate item shall be taken in the estimate for material testing charges, on the basis of testing frequency and charges fixed by Vigilance & Quality Control Circle, for the current year and shall form part of Schedule B of tender.
- ii) For Specific tests like span load tests, plate/ pile load test etc. which are not included in the rate analysis of item, the rates for these tests shall be prepared on the basis of rates approved by M.E.R.I./ any competent Institute of Govt. of Maharashtra or Govt. of India.

Section D - Instructions for tender Clause

- i) The contractor shall produce the **work insurance policy**, the same will be reimbursed to the contractor. If contractor fails to produce the work insurance policy, Concerned Executive Engineer shall **draw the policy**, the expenditure incurred for drawing the policy shall be recovered from the 1st R.A. bill of the contractor as penalty to the Contractor.
- ii) If completion period of work is Extended, then period of work Insurance must be renewed/ extended as per requirement.

- iii) **Mandatory Testing of Material and Penalty Clause**

It is mandatory on the part of contractor to carry out all the required tests of various construction materials as mentioned in schedule 'B' of the tender. If the contractor fails to submit required test result of the various construction materials as mentioned in the items of schedule 'B', he will be liable to deposit the amount at penal rate of five times of the amount of particular test which he has not carried out. Contractor will be informed by the Engineer-in-Charge through letter. On receipt of letter, contractor will have to either deposit the said amount or to carry out the required test within ten days. If he again fails to carry out the required tests in stipulated time limit, the said tests will be carried out by the department and total expenditure incurred on the testing charges plus five times amount of testing charges will be recovered from the contractor's bill.

As this recovery is only due to the negligence on the part of contractor to carry out work as per Tender conditions and Executive Engineer's decision will be final and binding on the contractor and it can not be challenged by the contractor by way of Appeal, Arbitration or in the Court of Law.

Considering above, relevant clause shall be included in DTP.

Tender Percentage for Royalty, Testing charges and Man power

While preparing D.T.P, the Schedule "B"/BOQ amount shall be divided as(A) work Portion and (B), Royalty charges, Testing charges and Man power for Dept

For B-1 tender the Percentage shall be applied to work portion. (A) only.

For B-2 tender the Rate of item shall be applied to work portion. (A) only.

In above both case the part "B" of schedule B/BOQ will be intact.

Considering above, relevant clause shall be included in DTP.

The percentage above or below coated by the successful bidder shall not be applied for the items of Testing Charges, Royalty and also insurance premium for all types of contract.

Section E - Additional notes for Coastal Items

- i) Coastal items are applicable for Mumbai City, Mumbai Suburban, Thane, Palghar, Raigad, Ratnagiri & Sindhudurg Districts.
- ii) This schedule of rates is applicable to all coastal protection works such as Anti Sea Erosion Bund, Groyne, Breakwater etc. to be constructed in the tidal condition along the sea coast & in the sea/creek area of all Coastal Districts.
- iii) For all completed items no initial lead is considered for material like sand, metal, stones etc. Lead charges for these materials shall be added while estimation.
- iv) Following increase over normal schedule of rates mentioned in this schedule are admissible on following accounts.
 - a) Defence Area [such as INS Hamla, Malad for security reasons] : 10%In Case more than one percentage increase on basic rates is admissible, instead of adding both the percentages, the higher percentage should be considered. (e.g. if any Defence area falls in the Municipal Corporation area then percentage addition will be only 10% and not with 10% + 5%). The above percentage increase should be applied on completed item rate.
- v) Items which comes under tidal condition 10% is to be added over completed item rate.
- vi) The head load is to be considered with prior permission of Coastal Engineer while preparing detailed rate analysis for inaccessible area where shifting of materials by head load is necessary. The State Schedule of Rates shall be adopted.
- vii) For the works in Elephanta, Arnala Fort, Panju island and such other islands and works such as light houses, guide poles to be constructed on the island or in the Sea/Creek, the actual boat charges for transportation of materials and labours shall be taken and detailed rate analysis for transportation of materials by boats shall be done and approved by Coastal Engineer. The boat charges shall be considered as follows:
 - a) Small boat (Single Cylinder @ Carrying Capacity = 1.50 MT) : Rs.3000/- per Day
 - b) Big boat (Double Cylinder @ Carrying Capacity = 5.00 MT) : Rs.6000/- per Day
- viii) The items included in this Section of schedule of rates are special items required for Harbour Engineering Works. For other items, State schedule of Rates should be adopted. **Items which comes under tidal condition 10% is to be added over completed item rate.**

Section F - Road Furniture

- i) IRC 67 2012 Table 6.2 Suggested Guidelines for Usage of Retro-Reflective Sheeting

Class of Sheeting	Type of Sheeting (ASTM)	Category of Road				
		National/State Highway	Major District Roads	Rural Roads	Urban/City Roads	Express way
Class A	Type I	No	Yes	Yes	No	No
	Type II	No	Yes	Yes	No	No
Class B	Type III	Yes	Yes	Yes	Yes	No
	Type IV	Yes	Yes	Yes	Yes	No
Class C	Type VIII	Yes	No	No	Yes	Yes
	Type IX	Yes	No	No	Yes	Yes
	Type XI	Yes	No	No	Yes	Yes

- ii) IRC 67 2012 Table 8.3 Colour Pattern for Direction Information Signs

Road Type	Backgrou	Arrows/Border/Letters
Expressway	Blue	White
National Highway (NH)	Green	White
State Highway (SH)	Green	White
Major District Road (MDR)	Green	White
Village Road (VR)	White	Black
Urban/City Road	Blue	White

- iii) Warranty for Class B and Class C sheet of Cautionary / Mandatory / Informative Sign boards

Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have **7 years written warranty** from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in Charge by the contractor/supplier.

Class C (Type XI Micro prismatic grade sheeting) shall have **10 years written warranty** from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in Charge by the contractor/supplier.

The contractor shall produce the written warranty from the manufacturer and authorise distributor/convertor, else 20% of single item amount shall be deducted from his first R.A. Bill.

Section G

कंत्राटदारांच्या मागण्या व त्यावर केलेली कार्यवाही

अ.क्र.	कंत्राटदारांच्या मागण्या	केलेली कार्यवाही/अनुपालन
१	Covid मुळे मजुरीचे दर २० ते २५ टक्के वाढविण्यात यावे.	कामगार आयुक्तांकडून प्राप्त मजुरीच्या दरानुसार मागील वर्षाच्या दराच्या तुलनेत १० ते १५ टक्के वाढ झालेली आहे.
२	कॉक्रीट आणि बिटुमिनची किरकोळ कामाकरीता With Scada व Without Scada असे वेगवेगळ्या बाबी असाव्यात.	शासनाच्या धोरणानुसार Scada सह कामे करणे बंधनकारक करण्यात आल्याने लहान व दुरुस्तीच्या कामाकरिता Scada वापरणे शक्य नसल्यास वजा करावयाचे दर राज्य दरसूची मध्ये सर्वसाधारण टिप्पणी मध्ये नमूद केले आहे.
३	दर निश्चिती करतांना कोणताही Restriction Factor किंवा Round Up करण्यात येऊ नये.	मागणी प्रमाणे तपासणी करण्यात आली आहे. मागील २ वर्षा पासून अश्या प्रकारे Restriction Factor लावण्यात येत नाही.
४	डांबरीकरणाच्या बाबींचे दर कमी आहेत.	अशा मागणी बाबत मागील वर्षा पेक्षा डांबराचे दि. १६/०७/२०२० पासूनचे दर (दरसूची ग्राह्य धरल्यानुसार) कमी असून पाहिजे तेवढी वाढ झाल्याचे दिसून येत नाही. तथापी, अंदाजपत्रक तयार करताना Refinery कडून प्राप्त अद्यावत दरानुसार येणारा फरक विचारात घेऊनच अंदाजपत्रक तयार केले जाते. त्यानुसार कामाचा दर असणार आहे.
५	Insurance ची रक्कम दरपृथःकरणात जोडण्यात यावी.	Insurance ची रक्कम दरपृथःकरणात समाविष्ट करण्याची आवश्यकता नाही. याकरिता राज्य दरसूची मध्ये प्रतीपूर्ती करण्याचे General Note मध्ये उल्लेख करण्यात आला आहे.
६	टोल नाक्यावर २२ ठिकाणी टोलची वसूली डांबर वाहतूक करताना करण्यात येत असून याचा विचार वाहतूकीचे दर ठरविताना करण्यात यावा.	राज्यातील वेगवेळ्या ठिकाणी वाहतूक करताना कमी जास्त प्रमाणात टोलची संख्या असल्याने याचा विचार अंदाजपत्रक तयार करताना करणे अपेक्षित आहे. याकरिता राज्य दरसूचीतील सर्वसाधारण टिप्पणी मध्ये उल्लेख केला आहे.
७	लहान कामांमध्ये pack tin bitumen वापरण्याबाबत general note मध्ये उल्लेख असावा.	या मागणी बाबत अंदाजपत्रकामध्ये तयार करणाऱ्याने विचार करुन कार्यवाही करता येते.
८	Mastic asphalt ६ मी.मी. चे दर रु. ६००/- प्रती चौ.मि. असावे.	आता १२ मी.मी. जाडीची Mastic asphalt ची बाब देखील प्रस्तावित करण्यात आली आहे. सन २०१९-२० चा दर रु. २८३/- प्रती चौ.मी. सन २०२०-२१ चा दर रु. ३८५/- प्रती चौ.मी. ६ मी.मी. जाडीचा दर — रु.२६२/- प्रती चौ.मी. आला आहे.
९	GST हा Gross amount वर देण्यात यावा.	राज्यदरसूची मध्ये GST शिवाय दर असल्याने सदर मुद्दा दरसूचीला लागू होत नाही.

अ.क्र.	कंत्राटदारांच्या मागण्या	केलेली कार्यवाही/अनुपालन
१०	Testing charges व Royalty charges वर टक्केवारी कमी अथवा जास्त करण्यात येऊ नये.	General Note मध्ये उल्लेख करण्यात आलेला आहे.
११	काही बाबींचे दर वाढवावे / तपासावे.	आवश्यकतेनुसार कार्यवाही करण्यात आली आहे.
१२	M/C व Transportation Lead Charges तपासून घेण्यात यावेत.	वर्षानुवर्षे प्रचलित पद्धतीनेच Mechanical Wing ने अंतिम करून दिले आहेत. पद्धत बदलण्याची आवश्यकता दिसून येत नाही.
१३	Task Work तपासावे.	राज्य दरसूची मध्ये जवळपास २२५० बाबी समाविष्ट असून या सर्व बाबींचे Task Work तपासण्या करिता बराच वेळ व मनुष्यबळ लागणार असून मर्यादित वेळेत दरसूची अद्यावत करावयाची असल्याने सर्व बाबींचे Task Work तपासणे शक्य झाले नाही. याकरिता पुढच्या वर्षी Task Work व इतर बाबींची तपासणी करण्याकरिता एखाद्या Consultant ची मदत घेऊन सन २०२१-२२ ची दरसूची तयार करण्याचे नियोजन आहे.
१४	रस्ते सुरक्षा बाबी नियमावली तयार करणे व SSR मध्ये अंतर्भूत करणे.	काही बाबींचा समावेश करण्यात आला असून रस्ता सुरक्षेच्या बाबी याकरिता सखोल विचार करून लागणाऱ्या बाबी करिता बराच वेळ व मनुष्यबळ लागणार असून वेळेअभावी सर्व बाबी समाविष्ट करता आल्या नाही. याकरिता एखाद्या Consultant ची मदत घेऊन सन २०२१-२२ च्या दरसूचीत अशा बाबींचे समावेश करण्याचे नियोजन आहे.
१५	Parks & Garden ची दरसूची समाविष्ट करावी.	सदर बाब Parks & Garden शी संबंधित असून या करिता त्यांचे कडून अद्यावत दरसूची प्राप्त करून व आवश्यकतेनुसार नवीन लागणाऱ्या बाबींच्या देखील समावेश एखाद्या Consultant ची मदत घेऊन सन २०२१-२२ च्या दरसूचीत करण्याचे नियोजन आहे.
१६	मुरुमाचे Rate Abstract बनवितांना	राज्य दरसूची मध्ये मुरुमाचे Supply चे दर हे क्वारी साईट वरील दर असल्याने यात जागेवरील मुरुमाचे भाव घेतले असल्याने यात पुन्हा जमीनीचे भाव वेगळ्याने घेण्याची आवश्यकता नाही. याशिवाय अंदाजपत्रक तयार करताना वाहतुकीचे दर वेगळे दिले जातात. शहरालगतचीच जमीन वापरणे गरजेचे दिसत नाही. तसेच राज्य दरसूची तयार करत असताना प्रत्येक ठिकाणचे जिल्हा निहाय व तालुका निहाय जमीनीचे दर वेगवेगळे असतात.

अ.क्र.	कंत्राटदारांच्या मागण्या	केलेली कार्यवाही/अनुपालन
१७	फलक तयार करत असतांना मशीनरीची आवश्यकता असते. ज्यात प्रामुख्याने वेल्डींग मशीन, कटर, ड्रील मशीन, ग्रायंडर, रिबीटींग मशीन, एअर कॉप्रसर (रंग मारण्यासाठी) तसेच रिफ्लेक्टिव शिटींगचा वापर करताना फलकावरील माहिती तयार करण्यासाठी कॉम्प्युटर वर सर्व माहिती कट करण्यासाठी प्लॉटर, हॅडस्विचजींग मशीन (पेस्ट करण्यासाठी) या सर्व मशीनरीची आवश्यकता असते. यांचा येथे विचार होणे आवश्यक आहे. त्यासाठी लागणारा कॉम्प्युटर ऑपरेटरचा सुध्दा अंतर्भाव व्हावा.	फलक तयार करण्याच्या बाबींचे दरपृथःकरणामध्ये साहित्य रकमेच्या २०% रक्कम Cleaning, processing, Cutting, Screen printing, Lettering & Sign Fixing करिता समाविष्ट करण्यात आलेली आहे.
१८	फलक तयार झाल्यानंतर साइटवर नेण्यासाठीचा वाहतुकीचा विचार होणे आवश्यक आहे.	दरपृथःकरणामध्ये वाहतुकीचा विचार करण्यात आला आहे.
१९	फलके बसवताना एका ठिकाणी दोनच फलके बसतात. फलके ही काही अंतरावरच बसवावे लागतात. एक फलक ०/० या साखळीत असेल तर दुसरा ३/० तिसरा ५/० अशा अंतरानेच असतात. या कामासाठी खड्डा करण्यासाठी व माल भरण्यासाठी दोन मजूर — बोर्ड काढून फिटींग करून वळंब्यात बसवण्यासाठी एक मिस्त्री व एक मजूर व एक मदतनीस असे ४ मजूर व एक मिस्त्री काम करत असतील तर रोज १० ते १२ पोस्ट बसविल्या जातात. त्यासाठी एक आयचरही सोबत ठेवावी लागते. मदतनीस हा पाणी आणणे तसेच दुसऱ्या दिवसा पासून पाणी टाकण्यासाठी आवश्यक असतो. या बाबीचाही विचार होणे आवश्यक आहे.	Standard Data Book प्रमाणे खड्डा तयार करणे व माल भरण्याच्या बाबींचा समावेश करण्यात आलेला आहे.
२०	आय.आर.सी.६७, आवृत्ती २०१७ अन्वये पोस्ट साठी जी.आय. पाईपचा वापर करण्यास सांगितले आहे. त्याची एकही बाब दिसून येत नाही.	पोस्टसाठी जी.आय.पाईपचा वापर करण्या संबंधाने स्वतंत्र बाब समाविष्ट करण्यात आलेली आहे.
२१	रस्ता सुरक्षाची कामे दर्जेदार होण्यासाठी राज्यस्तरीय दरसूचीत काही मार्गदर्शक सुचना देण्यात याव्यात. त्यामुळे दर्जेदार मालाचा दर आपण देऊन दर्जाहीन फलके बसवणे बंद होईल. आपणास हे योग्य वाटत असेल तर मुख्य अभियंता, औरंगाबाद, पुणे, अमरावती, नाशीक यांनी काही मार्गदर्शक सुचना मंजूर केल्या आहेत. त्याचा जनरल नोट मधील रस्ता सुरक्षा भागात अंतर्भाव करावा.	रस्ता सुरक्षेच्या दृष्टीने मार्गदर्शक सुचना निविदा अटींमध्ये समाविष्ट करण्यात येत आहे.

अ.क्र.	कंत्राटदारांच्या मागण्या	केलेली कार्यवाही/अनुपालन
२२	मुंबई मेट्रोपॉलिटन एरिया सारखे क्षेत्रात विशेष नियोजन प्राधिकरण अंतर्गत येणाऱ्या बांधकामाकरिता SSR मध्ये दर वाढविणे.	राज्य दरसूची मध्ये महानगरपालीका व नगरपरिषद एरिया मधील बांधकामाला जास्त खर्च लागत असल्याने त्याकरिता दर ठराविक टक्केवारीने वाढविण्याबाबत तरतूद असून मात्र मुंबई मेट्रोपॉलिटन एरिया सारखे क्षेत्रात विशेष नियोजन प्राधिकरण अंतर्गत येणाऱ्या बांधकामाकरिता SSR मध्ये अशा प्रकारची तरतूद नसल्यामुळे आता तयार करण्यात आलेल्या दरसूची मध्ये याकरिता राज्य दरसूचीतील दरावर २ % वाढविण्याची तरतूद केली आहे.
२३	SEAL Coat वरील ग्रीट मारण्यासाठी हायड्रोलिक मशिनरी धरुन DSR चा दर काढण्यात आला आहे परंतु काम करीत असताना रस्ते वरील वाहतूक थांबविता येत नाही त्यामुळे SEAL Coat वरील ग्रीट मारण्यासाठी हायड्रोलिक मशिनरी ऐवजी लेबर ने काम करावे लागते तरी लेबर खर्च अधिक करुन Rate Abstract बनविण्यात यावा.	सध्याच्या काळात जास्तीत जास्त काम मशिनरीनेच केले जात असल्यामुळे मजूरामार्फत काम करणे बंद झालेले आहे.

As Per Draft Send								
Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2020-21 ROAD WORKS								
1	Road Survey and DPR	1.01		Fixing chainage Stone /Bench mark Stone / Center Stone / Apex Stone in earth and all sorts of soil and soft murum including conveying excavated material, fixing stone, including paintaining lettering numbers and back filling etc. complete.	As directed by Engineer in charge	Number	169	166
2	Road Survey and DPR	1.02		Taking the trial pit for roads, alignment, C.D. Works in earth soil of all sorts, sands gravel or soft murum, including stacking the excavated material including all lifts and necessary back filling upto depth 1.5 meters	As directed by Engineer in charge	Cubic Metre	425	425
3	Road Survey and DPR	1.03		Taking the trial pit for roads, alignment, C.D. Works in earth soil of all sorts, sands gravel, or soft murum, including stacking the excavated material including all lifts and necessary back filling upto depth 3.0 meters	As directed by Engineer in charge	Cubic Metre	459	459
4	Road Survey and DPR	1.04		Taking the trial pit for roads, alignment, C.D. Works in Hard murum, including stacking the excavated material including all lifts and necessary back filling upto depth 1.5 meters	As directed by Engineer in charge	Cubic Metre	561	561
5	Road Survey and DPR	1.05		Taking the trial pit for roads, alignment, C.D. Works in Hard murum, including stacking the excavated material including all lifts and necessary back filling upto depth 3.0 meters	As directed by Engineer in charge	Cubic Metre	629	629
6	Road Survey and DPR	1.06		Taking the trial pit for roads, alignment, C.D. Works in Hard murum, and Boulders including stacking the excavated material including all lifts and necessary back filling upto depth 1.5 meters	As directed by Engineer in charge	Cubic Metre	696	696
7	Road Survey and DPR	1.07		Taking the trial pit for roads, alignment, C.D. Works in Hard murum, and Boulders including stacking the excavated material including all lifts and necessary back filling upto depth 3.0 meters	As directed by Engineer in charge	Cubic Metre	734	734
8	Road Survey and DPR	1.08		Fixing survey pegs in earth and all sorts Soil, Sand, Gravel, Soft Murum, etc. including conveying, fixing etc. complete.	As directed by Engineer in charge	Number	10	10
9	Road Survey and DPR	1.09		Reconnaissance Survey of Road alignment in plain country including taking three dimensions of apexes, verification of type of land etc. alongwith the alignment etc. complete (Without Chaining).	As directed by Engineer in charge	Kilometre	1951	1828
10	Road Survey and DPR	1.10		Reconnaissance Survey of Road alignment in plain country including taking three dimensions of apexes, verification of type of land etc. alongwith the alignment etc. complete (With Chaining).	As directed by Engineer in charge	Kilometre	4746	4391
11	Road Survey and DPR	1.11		Reconnaissance Survey of a road alignment for new hilly road utilising exsisting forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (Without Chaining)	As directed by Engineer in charge	Kilometre	5291	4428
12	Road Survey and DPR	1.12		Reconnaissance Survey of road alignment for new hilly road utilising exsisting forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (With Chaining)	As directed by Engineer in charge	Kilometre	5078	4310

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
13	Road Survey and DPR	1.13		Reconnaissance Survey of road alignment in hilly road utilising existing forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (Without Chaining) .	As directed by Engineer in charge	Kilometre	2814	2167
14	Road Survey and DPR	1.14		Reconnaissance Survey of road alignment in hilly road utilising existing forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (With Chaining) .	As directed by Engineer in charge	Kilometre	5417	4649
15	Road Survey and DPR	1.15		Detailed survey of road in plain country including chaining and levelling with cross sections at every two chains inclusive of closing of survey each day.	As directed by Engineer in charge	Kilometre	5983	3944
16	Road Survey and DPR	1.16		Detailed survey of road length where earthwork is partly done including chaining and levelling with cross sections at every two chains inclusive of closing survey each day.	As directed by Engineer in charge	Kilometre	5645	3225
17	Road Survey and DPR	1.17		Detailed survey of road through hilly country taking cross section at every chains or as required including chaining , levelling and closing survey each day.	As directed by Engineer in charge	Kilometre	9035	5203
18	Road Survey and DPR	1.18		Detailed survey of road through hilly country taking cross section at every chains as desired including chaining ,levelling and closing survey each day utilising existing cart track.	As directed by Engineer in charge	Kilometre	6970	4751
19	Road Survey and DPR	1.19		Providing and Fixing Wooden survey pegs including White washing etc. complete.	As directed by Engineer in charge	Number	45	30
20	Road Survey and DPR	1.20		Carrying out catchment area traverse survey of minor stream (not traceable in toposheet) below 100 acres	As directed by Engineer in charge	Kilometre	3263	1852
21	Road Survey and DPR	1.21		Cutting down branches of trees , bushes etc. stacking the material neatly as directed (For Motarable Road)	As directed by Engineer in charge	Kilometre	7399	7399

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
22	Road Survey and DPR	1.22		Providing detailed layout plan of area in scale 1:500 including carrying out contour survey and detailed Engineering plane table Survey with the help of 24" Alidade. The dolomite area measurement of the plot and structures, trees, over head line and under ground service amenities within the area, with triangular method and giving details of the structures, such as total area, type of building and distance from all corners taking trial pit 0.5x0.5x2.00 m.- 2Nos. per acre and collection of record from city survey / D.I.L.R. authorities and authentication. The plan shall be traced on 75 micron polyster film and shall be submitted along with three Amonia prints. The contour levels shall be marked at 0.5 Meter intervals. Note:- The items includes- 1)Traversing work with theodolite and steel tape. 2) Levelling Grid Work of the terrain. 3)Detailed Engineering Survey and contouring work of the terrain. 4)Plotting work. 5)Collection of Record. a) up to 1 Acre	MORTH	Acre	8172	6756
23	Road Survey and DPR	1.23		Providing detailed layout plan of area in scale 1:500 including carrying out contour survey and detailed Engineering plane table Survey with the help of 24' Alidade. The dolomite area measurement of the plot and structures, trees, over head line and under ground service amenities within the area, with triangular method and giving details of the structures, such as total area, type of building and distance from all corners taking trial pit 0.5x0.5x2.00 m.- 2Nos. per acre and collection of record from city survey / D.I.L.R. authorities and authentication. The plan shall be traced on 75 micron polyster film and shall be submitted along with three Amonia prints. The contour levels shall be marked at 0.5 Meter intervals. Note:- The items includes- 1)Traversing work with theodolite and steel tape. 2) Levelling Grid Work of the terrain. 3)Detailed Engineering Survey and contouring work of the terrain. 4)Plotting work. 5)Collection of Record. b) Above 1 Acre	As directed by Engineer in charge	Acre	8288	6756
24	Road Survey and DPR	1.24		Reconnaissance survey using Total Station including study of sheets, maps etc. for alignment including 3 dimension of apexes, fixing pegs, chain and compass survey with L-Section and cross section of alignment at every 30 m or at every change of deviation whichever is less including fly levels at closing of day, fixing apex and B.M. stones of size 0.20*0.20*0.75 m in 1:2:4 C.C. at every 200 m and preparation of alignment plans and all type of compliance if required from department.	As directed by Engineer in charge	Kilometre	26812	13670
25	Road Survey and DPR	1.25		Preparation of detailed Plans and Estimates of road including typing in 5 copies, ammonia prints, with colouring of plans, proper filing, indexing and paging etc. complete and all types of compliance, if required from Department.	As directed by Engineer in charge	Kilometre	15029	13537

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
26	Road Survey and DPR	1.26		Survey of C.D. works including taking L-section of Road, catchment area plan by Traverse method and taking trial pits of size 1.00x1.00x1.50 m including preparation of detailed Plans and Estimates in 5 copies and all types of compliance if required from the Department.	As directed by Engineer in charge	Number	15146	11105
27	Road Survey and DPR	1.27		Survey of Minor bridge with Total station including taking L section of existing road & two defined cross sections ,one of U/s and one of D/s, one vergin cross section on alternate proposed cross sections and bed slope of stream upto sufficient long distance as required with chain and compass. Taking three trial pits of size 1.00x1.00x3.0 m & collecting samples of materials at site for ascertaining the silt factor, unit weight test, specific gravity from Govt. approved laboratories(testing charges to be borne by the agency) and preparation of detailed survey data, submission of the project duly typed & colouring of the Autocad prints, site plan and other drawings in 5 copies etc. complete if required from the Department.	As directed by Engineer in charge	Number	58727	32942
28	Road Survey and DPR	1.28		Survey of major bridge with Total station including taking L-section of existing road two defined cross -sections (one at U/S and one at D/s) & one vergin cross section on alternate proposed cross sections and bed slope of stream upto sufficient long distance as required with chain and compass. Taking 5 trial pits, three in bed, two on banks of size 2.00x2.00x3.00 m for collecting samples of materials at site for ascertaining the silt factor, unit weight test, specific gravity from Govt. approved laboratories (testing charges to be borne by the agency) and preparation of detailed survey data, submission of the project duly typed & colouring of autocad prints, site plan and other drawings in 5 copies etc.complete. And all types of compliance if required from Department. (Excluding taking trial bores and contouring)	As directed by Engineer in charge	Running Metre	1789	1073
29	Road Survey and DPR	1.29		Contour Survey of stream with Total station U/S and D/S of proposed bridge site including levelling at every 30 X 30 m preparing contour map with Autocad prints etc.complete in 5 sets.	As directed by Engineer in charge	Square Kilometer	96285	59714
30	Road Survey and DPR	1.3		Survey of raised Causeway with Total station including reconnaissance, taking L section of existing road one defined one vergin one alternate proposed cross section and stream upto sufficient lengths with chain and compass taking two trial pits of size 2.00x2.00x3.00 m. collecting samples at site ascertaining silt factor and preparation of detailed survey data,submission of the project duly typed colouring of the autocad prints,site plan and other drawing etc.complete if required from Deparetment.	As directed by Engineer in charge	Number	40087	22530

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
31	Road Survey and DPR	1.31		Preparation of detailed plans and estimates of Raise Causeway on the basis of the approved detailed survey data by competent authority including typing in 5 copies autocad prints site plan other drawings with colouring of plans proper filling indexing and paging etc.complete and all types of compliance if required from Department.	As directed by Engineer in charge	Number	9607	8494
32	Road Survey and DPR	1.32		Complete survey of stream with Total station having catchment area upto 1 sq. kilometer including catchment survey taking necessary L.S./C.S. and other details etc. complete.	As directed by Engineer in charge	Number	8464	4277
33	Road Survey and DPR	1.33		Complete survey of stream having catchment area above 1 sq. Mile and upto 5 sq. Miles including taking necessary L.S./C.S. and other details etc. complete.	As directed by Engineer in charge	Number	17557	11943
34	Road Survey and DPR	1.34		Reconnaissance survey of alignment in plain country for approaches to the bridge including taking three dimensions of apexes. (Without chaining)	As directed by Engineer in charge	Kilometre	2093	1629
35	Road Survey and DPR	1.35		Fly levelling for carrying out bench mark.	As directed by Engineer in charge	Kilometre	1706	1111
36	Road Survey and DPR	1.36		Detailed survey of approaches including Chain and Compass survey along bridge alignment and approaches including closing each day work.	As directed by Engineer in charge	Kilometre	4340	2989
37	Road Survey and DPR	1.37		Taking longitudinal section of streams extending upstream and downstream side of the bridge site, requisite number of cross section of the stream on either sides block contouring and other details etc. complete. (Length of L.S. and C.S. for contouring to be worked out)	As directed by Engineer in charge	Kilometre	5243	3892
38	Road Survey and DPR	1.38		Demarcation of right of way (ROW) as per design using total station including calculation of co-ordinates of 30 Meter interval on both sides of road.	As directed by Engineer in charge	Kilometre	9421	4864
39	Road Survey and DPR	1.39		Preparation of Land Acquisition proposal including collection of 7/12 and 8/A documents marking alignment on village maps , area calculation, preparation of proposal, printing, binding, etc. complete and submission of 5 sets more ever liasoning and coordination with revenue authorities with compliance if any until finalisation of award including Joint measurement of the alignment. For new alignment.	As directed by Engineer in charge	Kilometre	17727	5808
40	Road Survey and DPR	1.40		Preparation of Land Acquisition proposal including collection of 7/12 and 8/A documents marking alignment on village maps , area calculation, preparation of proposal, printing, binding, etc. complete and submission of 5 sets more ever liasoning and coordination with revenue authorities with compliance if any until finalisation of award including Joint measurement of the alignment. For existing alignment.	As directed by Engineer in charge	Kilometre	17201	7667

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
41	Road Survey and DPR	1.41		Carrying of detailed topographic survey by using total station along the existing or new road including taking L-section and cross section at every 30 meter ROW ,taking at least 10 spot levels per cross section, picking up all existing details inside the Row like electric telephone line , encroachments, structures etc. connecting all the primary total station control points by G.I.S.Bench marks level or whichever available with department using auto level and preparing Auto CAD plan by using above data taking out 1 set of black and white printout on 50 micron polyster film sheet A2 size and 2 sets of coloured printout on A2 size submitting soft copy all data on CD. Plain Terrain New Alignment	As directed by Engineer in charge	Kilometre	44437	21048
42	Road Survey and DPR	1.42		Carrying of detailed topographic survey by using total station along the existing or new road including taking L-section and cross section at every 30 meter ROW ,taking at least 10 spot levels per cross section, picking up all existing details inside the Row like electric telephone line , encroachments, structures etc. connecting all the primary total station control points by G.I.S.Bench marks level or whichever available with department using auto level and preparing Auto CAD plan by using above data taking out 1 set of black and white printout on 50 micron polyster film sheet A2 size and 2 sets of coloured printout on A2 size submitting soft copy all data on CD. Plain Terrain Existing Alignment.	As directed by Engineer in charge	Kilometre	41415	17784
43	Road Survey and DPR	1.43		Carrying of detailed topographic survey by using total station along the existing or new road including taking L-section and cross section at every 30 meter ROW ,taking at least 10 spot levels per cross section, picking up all existing details inside the Row like electric telephone line , encroachments, structures etc. connecting all the primary total station control points by G.I.S.Bench marks level or whichever available with department using auto level and preparing Auto CAD plan by using above data taking out 1 set of black and white printout on 50 micron polyster film sheet A2 size and 2 sets of coloured printout on A2 size submitting soft copy all data on CD. Hilly Terrain New Alignment	As directed by Engineer in charge	Kilometre	56577	27658
44	Road Survey and DPR	1.44		Demarcation of Road boundry (ROW) including fixing the boundry stones of standard size and shape including fixing in block of standard size of C.C. of 1:4:8 white washing at 30 M interval on both sides	As directed by Engineer in charge	Kilometre	38856	10019

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
45	Road Survey and DPR	1.45		Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia over burden (by diamond drilling machine) such as soil of all sorts, soft murum,hard murum and boulders and in soft rock including all materials such as casing pipes and accessories oil, grease, steel, rods, and such other materials as required (including conveying the material to site of work) . Preserving the loose sample in glass jar and core sample serially on site of work and conveying the same to HQ of concernring office as directed. a) over burden 0 to 50 meter.	As directed by Engineer in charge	Running Metre	2069	409
46	Road Survey and DPR	1.46		Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil,grease,steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concernring office as directed. Quartzite with diamond drill with Nx Bit 0 to 50 metre	As directed by Engineer in charge	Running Metre	6768	476
47	Road Survey and DPR	1.47		Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil,grease,steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concernring office as directed. Quartzite with diamond drill with Ax Bit 0 to 50 metre	As directed by Engineer in charge	Running Metre	4069	866
48	Road Survey and DPR	1.48		Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil,grease,steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concernring office as directed. Other Rock with diamond drill. 0 to 50 metre	As directed by Engineer in charge	Running Metre	3864	476
49	Road Survey and DPR	1.49		Providing tun tappa core boxes of jungle wood of size1.25mx 0.35x 0.15m for preserving core sample with all fixtures and fastening handles including locking arrangment etc . complete.	As directed by Engineer in charge	Number	5052	1509
50	Road Survey and DPR	1.50		Providing and maintaining temporary platform of bore location in river bed in upto 1 m of standing water and of size 3.50 x 4.00 M by using sand bags in layer for platform including all required materials labours etc. complete.	As directed by Engineer in charge	Number	12067	6722

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
51	Road Survey and DPR	1.51		Providing and maintaining temporary platform for erecting boring machined in river bed to the depth of standing water 1m to 2m and of size 3.50 x 4.00 M by using 20 Nos. of M.S. empty barrels in M.S. frame made of M.S. angle size 50 x 50 x 5 mm with fabrication and over it a jungle wood planks platform of size 3.50 x 4.00 x 0.03 M size including supplying of nylon rope 24 mm dia. for anchoring platform include passage platform and engaging a labour etc. complete. 1 m to 2 m	As directed by Engineer in charge	Number	19802	6722
52	Road Survey and DPR	1.52		Providing and maintaining temporary platform for erecting boring machined in river bed to the depth of standing water 2 m and above and of size 3.50 x 4.00 M by using 20 Nos. of M.S. empty barrels in M.S. frame made of M.S. angle size 50 x 50 x 5 mm with fabrication and over it a jungle wood planks platform of size 3.50 x 4.00 x 0.03 M size including supplying of nylon rope 24 mm dia. for anchoring platform include passage platform and engaging a labour etc. complete. 2 m and Above.	As directed by Engineer in charge	Number	20389	6700
53	Road Survey and DPR	1.53		Providing and maintaining temporary platform for inspection from one bank to another bank of bore location in river bed in all depth of standing water of size 1.30 x 2.00 M by using 4 Nos. of M.S. empty barrels in M.S. frame made of M.S. angle size 50 x 50 x 5 mm with fabrication and over it a jungle wood planks platform of size 1.30 x 2.00 x 0.03 M size including supplying of nylon rope 24 mm dia. and 300 M length of movement of platform engaging a labour on inspection days etc. complete.	As directed by Engineer in charge	Number	18864	10110
54	Road Survey and DPR	1.54		Conveying the boring machine and engine and all its accessories etc. to the site of the work and back including loading unloading etc. complete. (Note - Distance to be measured from the station of boring machine engine etc. of district head quarters to site of the work by short route).	As directed by Engineer in charge	Kilometre	81	14
55	Road Survey and DPR	1.55		Shifting boring plant with all its components and reinstalling the same at the directed place including all its charges etc. complete.	As directed by Engineer in charge	Shift	8246	7847
56	Road Survey and DPR	1.56		Providing detailed reports of the inspection logging of drilled hole by observing visual description of data as per depth, thickness of layer, type of sample, wash sample, bore recovery type of drill etc. complete.	As directed by Engineer in charge	Number	9680	0
57	Road Survey and DPR	1.57		Providing detailed geological reports of proposed site by maintaining geotechnical investigation of structure stratification collecting soil, rock and ground water samples for laboratory tests to arrive the foundation design parameters . Rock properties such as type of rock, jointing fractures, etc. complete with suggestion about the site foundation and remedies.	As directed by Engineer in charge	Report	38720	0

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58	Road Survey and DPR	1.58		Preparing land plans and land schedule including carrying out plane table survey for Private / Forest land on both side of road in Rural and Urban areas. The work of plotting and certificate from T.I.L.R. or other authorities shall be obtained from correctness of prepared plans. Tracing and taking out prints and preparing the requisite booklets duly bounds and printing with all materials etc. Three land plan booklets along with original tracing shall be supplied including procurement of village maps / forest land plans from concern authorities. Note : The item plane table includes following points 1) Carrying out plane table survey. 2) Plotting of duly surveyed area . 3) Collection of data from D.I.L.R. authorities and verification of survey maps by D.I.L.R. authorities . 4) Preparing three booklets of survey maps including taking out prints of survey maps, binding etc. 5) Carrying out plane table survey of the Private / Forest land along the road upto 30 meters on either side from the road centre.	As directed by Engineer in charge	Kilometre	40433	13328
59	Road Survey and DPR	1.59		Geometrical design of road horizontal and vertical curves for design speed specified by IRC including carrying out trail for optimising of civil cost minimising land acquisition and maximum use of existing facility and preparation of widening arrangement drawing for insisting structures stake out date for horizontal alignment and working levels including super elevation effect etc. complete.	As directed by Engineer in charge	Kilometre	11717	4094
60	Road Survey and DPR	1.60		Transferring and taking out design on coordinates of baseline on ground using nails for exsisting road surfaces and survey pegs for new alignments including taking out coordinates for horizontal curves at required interval of 50 meters etc. complete. (Extra line such as right of way median edges to toe line not included).	As directed by Engineer in charge	Kilometre	12218	6165
61	Road Survey and DPR	1.61		Preparation of roadway, drawing (Plan And Profile) on computer by using Autocad of required scale showing all topo feature and proposed construction details such as carriage way , median service road, toe line, retaining walls, cross drainage works, major structures, etc. complete. Including indexing, level tables, legend, basic information of project and design details etc.	As directed by Engineer in charge	Kilometre	10255	7677
62	Road Survey and DPR	1.62		Preparation of Engineering drawing as strip plan, widening scheme, index / key map, typical cross section, retaining walls, road furniture, general arrangement drawings for bus bays / truck lay-bays / rest areas / toll plaza / booths / and type drawing of pipe/ slab drains etc. on computer using Auto CAD.	As directed by Engineer in charge	Kilometre	9134	6557
63	Road Survey and DPR	1.63		Survey of C.D. works including taking L-Section of road, catchment area plan by Traverse method and taking trial pits of size 1.50M x 1.50M x 1.50M including preparation of detailed plans and estimates in 5 copies and all types of compliance if required from the department.	As directed by Engineer in charge	Number	9164	6587

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64	Road Survey and DPR	1.64		Design of junctions including detail layout of traffic signs, informatory boards traffic islands. Breaks in median verge including working levels at junctions as per IRC standards etc. complete. a) Major Junction	As directed by Engineer in charge	Number	28166	18425
65	Road Survey and DPR	1.65		Design of junctions including detail layout of traffic signs, informatory boards traffic islands. Breaks in median verge including working levels at junctions as per IRC standards etc. complete. b) Minor Junction	As directed by Engineer in charge	Number	15415	8946
66	Road Survey and DPR	1.66		Preparaion of initial design of flyovers with preparing General Arrangement drawing with dimensions etc. complete and preparation of rough estimate for all components of bridge. Including supplying four copies of coloured drawings and copy of drawing on C.D. (excluding geotechnical and structural design part.)	As directed by Engineer in charge	Running Metre	768	138
67	Road Survey and DPR	1.67		Preparation of draft / Final Report comprising of technical, financial economic feasibility and environmental aspects of the project including executive summary and detailed chapters on necessity and introduction of project existing and future traffic, design philosophy scope of work, summary of available cost estimates justification for rates adopted, key points of execution, salient features of the project, location of toll plaza, toll rate / policy to be adopted and specification of major construction items etc. in 8 copies having attractive cover and binding s directed by engineer in charge etc. complete.	As directed by Engineer in charge	Number	272885	204278
68	Road Survey and DPR	1.68		Preparation of Autocad drawing with colour print for Building / Bridge / Road/ CD Works in required size etc. complete. - A-0 Size	As directed by Engineer in charge	Number	4571	4208
69	Road Survey and DPR	1.69		Preparation of Autocad drawing with colour print for Building / Bridge / Road/ CD Works in required size etc. complete. A-1 Size	As directed by Engineer in charge	Number	3757	3434
70	Road Survey and DPR	1.70		Preparation of Autocad drawing with colour print for Building / Bridge / Road/ CD Works in required size etc. complete. A-2 Size	As directed by Engineer in charge	Number	2877	2635
71	Road Survey and DPR	1.71		Autocad drawing colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-0 Size	As directed by Engineer in charge	Number	145	0
72	Road Survey and DPR	1.72		Autocad drawing colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-1 Size	As directed by Engineer in charge	Number	97	0
73	Road Survey and DPR	1.73		Autocad drawing colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-2 Size	As directed by Engineer in charge	Number	48	0
74	Road Survey and DPR	1.74		Autocad drawing with colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-3 Size	As directed by Engineer in charge	Number	18	0

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75	Road Survey and DPR	1.75		Autocad drawing colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-4 Size	As directed by Engineer in charge	Number	12	0
76	Road Survey and DPR	1.76		Deploying Automated Traffic Count and classification system on Road (Two Lane) in both direction at designated traffic count post by using High Definition Cameras..Collecting the Non Editable Data In DVR System with necessary electronic and electrical arrangements or inventor of required capacity Classification of data as per vehicle category as required with the help of software and submitting the the reports to the concerned department in hard copies as well as in soft copy, including using necessary technical manpower etc. complete. A) Up to 7 Days (Two Lane)	As directed by Engineer in charge	Day	32621	13912
77	Road Survey and DPR	1.77		Deploying Automated Traffic Count and classification system on Road (One Lane) in both direction at designated traffic count post by using High Definition Cameras..Collecting the Non Editable Data In DVR System with necessary electronic and electrical arrangements or inventor of required capacity Classification of data as per vehicle category as required with the help of software and submitting the the reports to the concerned department in hard copies as well as in soft copy, including using necessary technical manpower etc. complete. B) Extra charges for every additional lane (If required)	As directed by Engineer in charge	Day	24560	11708
77a	Road Survey and DPR	1.78		Providing of Jeep/vehicle for conveying surey material, Engineers, labours etc. complete	As directed by Engineer in charge	Day	3630	0

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78	Road Sub grade	2.01	MORTH 201	Cutting down trees including trunks and branches with girths above 30cm to 60cm and stacking the materials neatly with all lifts and lead of 1000m as directed and earth filling in the depression / pit if any.	MORTH 201	Number	462	422
79	Road Sub grade	2.02	MORTH 201	Cutting down trees including trunks and branches with girths above 60cm to 90cm and stacking the materials neatly with all lifts and lead of 1000m. as directed and earth filling in the depression/pit if any.	MORTH 201	Number	760	640
80	Road Sub grade	2.03	MORTH 201	Cutting down trees including trunks and branches with girths above 90cm to 180cm and stacking the materials neatly with all lifts and lead of 1000m. as directed and earth filling in the depression/pit if any.	MORTH 201	Number	1575	1415
81	Road Sub grade	2.04	MORTH 201	Cutting down trees including trunks and branches with girths above 180cm to 270cm and stacking the materials neatly with all lifts and lead of 1000m. as directed and earth filling in the depression/pit if any.	MORTH 201	Number	2701	2462
82	Road Sub grade	2.05	MORTH 201	Cutting down trees including trunks and branches with girths above 270cm to 450cm and stacking the materials neatly with all lifts and lead of 1000m. as directed and earth filling in the depression/pit if any.	MORTH 201	Number	2804	2655
83	Road Sub grade	2.06	MORTH 201	Cutting down trees including trunks and branches with girths above 450cm and stacking the materials neatly with all lifts and lead of 1000m. as directed and earth filling in the depression/pit if any.	MORTH 201	Number	3069	2905
84	Road Sub grade	2.07	MORTH 201	Clearing grass and removal of rubbish up to a distance of 50 metres outside the periphery of the area .	MORTH 201	Square Metre	4	4
85	Road Sub grade	2.09	MORTH 201	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned up to a lead of 1000 metres including removal and disposal of top organic soil not exceeding 150 mm in thickness.	MORTH 201	Square Metre	11	11
86	Road Sub grade	2.10	MORTH 301	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed. By Manual Means. (with prior permission of S.E.)		Cubic Metre	272	272
87	Road Sub grade	2.11	MORTH 301	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	MORTH 301	Cubic Metre	85	5
88	Road Sub grade	2.13	MORTH 301	Excavation for roadway in hard murum and boulder including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	MORTH 301	Cubic Metre	94	12
89	Road Sub grade	2.14	MORTH 301	Excavation for roadway in soft rock, including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading or stacking as directed.	MORTH 301	Cubic Metre	138	20

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90	Road Sub grade	2.15	MORTH 301	Excavation for roadway in hard rock by controlled blasting including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stocking as directed.	MORTH 301	Cubic Metre	182	23
91	Road Sub grade	2.16	MORTH 301	Excavation for roadway in hard rock by wedging and chiselling or line drilling including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	MORTH 301	Cubic Metre	1047	363
92	Road Sub grade	2.18	MORTH 309	Excavation for catch / side water gutter in all sorts of soils to the specified section including stacking the excavated stuff in a regular bund and disposing of unsuitable or excess stuff as directed all sorts of soils.	MORTH 309	Cubic Metre	96	6
93	Road Sub grade	2.20	MORTH 309	Excavation for catch / side water gutter in Hard murum and boulder strata to the specified section including stacking the excavated stuff in a regular bund and disposing of unsuitable or excess stuff as directed.	MORTH 309	Cubic Metre	112	6
94	Road Sub grade	2.21	MORTH 309	Excavation for catch / side water gutter in Soft rock strata to the specified section including stacking the excavated stuff in a regular bund and disposing of unsuitable or excess stuff as directed.	MORTH 309	Cubic Metre	161	20
95	Road Sub grade	2.22	MORTH 309	Excavation for catch / side water gutters in Hard rock strata to the specified section including stacking the excavated stuff in a regular bund by chiselling and wedging and disposing of unsuitable or excess stuff as directed.	MORTH 309	Cubic Metre	1047	363
96	Road Sub grade	2.23	MORTH 305	Watering and compacting of embankment formed of materials obtained from the road cutting within a lead of 50 m, not less than 97 % of standard Proctor density after laying them in layers of 20 cm. to 30 cm. with vibratory roller.	MORTH 305	Cubic Metre	73	4
97	Road Sub grade	2.24	MORTH 305	Watering and compacting of embankment formed of materials obtained from the road cutting within a lead of 50 m, not less than 97% of standard Proctor density after laying them in layers of 20 cm. to 30 cm. with Power roller.	MORTH 305	Cubic Metre	59	4
98	Road Sub grade	2.25	MORTH 305	Conveying materials obtained from road cutting including all lifts, laying in layers of 20cm to 30cm. breaking clods, dressing to the required lines, curves, grades and section, watering and compacting to not less than 97% of standard Proctor density for a lead of over 50m. to 300m. inclusive from the site of excavation to the site of deposition as directed.	MORTH 305	Cubic Metre	163	81
99	Road Sub grade	2.26	MORTH 305	Conveying materials obtained from road cutting including all lifts, laying in layers of 20cm. to 30cm. breaking clods, dressing to the required lines, curves, grades and section, watering and compacting to not less than 97% of standard proctor density for a lead of 300m. to 500m. inclusive, from the site of excavation to the site of deposition as directed.	MORTH 305	Cubic Metre	333	190

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100	Road Sub grade	2.27	MORTH 305	Providing earth work in embankment with approved materials obtained from departmental land upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller to achieve not less than 97 % of standard proctor density etc. complete. (Material obtained from departmental Land)	MORTH 305	Cubic Metre	172	7
101	Road Sub grade	2.28	MORTH 305	Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from Other sources)	MORTH 305	Cubic Metre	442	7
102	Road Sub grade	2.29a	MORTH 408	Supplying hard murum/ kankar at the road site, including conveying and stacking complete.	MORTH 408	Cubic Metre	321	48
103	Road Sub grade	2.29b	MORTH 408	Supplying soft murum at the road site, including conveying and stacking complete.	MORTH 408	Cubic Metre	318	48
104	Road Sub grade	2.30	MORTH 408	Spreading hard murum/ soft murrum/ gravel or kankar for side width complete	MORTH 408	Cubic Metre	72	72
105	Road Sub grade	2.31	MORTH 408	Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etc. complete.	MORTH 408	Square Metre	16	3
106	Road Sub grade	2.32		Picking the road surface including sectioning etc. complete (WBM surface.)	As directed by Engineer in charge	Square Metre	26	12
107	Road Sub grade	2.33		Picking the road surface including sectioning etc. complete (BT surface.)	As directed by Engineer in charge	Square Metre	37	12
108	Road Sub grade	2.34		Providing dry rubble stone pitching 23 cm (about 9) thick including all material, quarry spalls, labour etc. complete.	As directed by Engineer in charge	Square Metre	334	105
109	Road Sub grade	2.35	MORTH 402	Providing, laying and spreading soil on a prepared sub grade, pulverizing, mixing the spread soil in place with rotavator with 3 per cent slaked lime with minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to achieve atleast 98 per cent of the max dry density to form a layer of sub base.	MORTH 402	Cubic Metre	532	29
110	Road Sub grade	2.36	MORTH 402	Providing, laying and spreading soil on a prepared sub grade, pulverizing, adding the designed quantity of cement to the spread soil, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base/base.	MORTH 402	Cubic Metre	712	29

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111	Road Sub grade	2.37	MORTH 402	Laying and spreading available soil in the sub-grade on a prepared surface, pulverizing, mixing the spread soil in place with rotavator with 3 per cent slaked lime having minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to the desired density to form a layer of improved sub grade.	MORTH 402	Cubic Metre	481	21
112	Road Sub grade	2.39	MORTH 403	Construction of embankment with Flyash conforming to table 1 of IRC: SP: 58 - 2001 obtained from coal or lignite burning thermal power stations as waste material, spread and compacted in layer of 200mm thickness each at OMC, all as specified in IRC: SP: 58-2001 and as per approved plans.	MORTH 403	Cubic Metre	121	8

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113	Road Sub Base and Base Course	3.01	MORTH 401	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader/ Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- Plant Mix Method and Grading - I Material	MORTH 401	Cubic Metre	1738	33
114	Road Sub Base and Base Course	3.02	MORTH 401	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader / Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- Plant Mix Method and Grading - II Material	MORTH 401	Cubic Metre	1738	33
115	Road Sub Base and Base Course	3.03	MORTH 401	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader / Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401-- Plant Mix Method and Grading - III Material	MORTH 401	Cubic Metre	1738	33
116	Road Sub Base and Base Course	3.04	MORTH 401	Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader / Paver on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- By Mix in Place Method and Grading - I Material	MORTH 401	Cubic Metre	1542	29
117	Road Sub Base and Base Course	3.05	MORTH 401	Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader / Paver on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- By Mix in Place Method and Grading - II Material	MORTH 401	Cubic Metre	1542	29
118	Road Sub Base and Base Course	3.06	MORTH 401	Construction of granular sub-base by providing close graded material, spreading in uniform layers with motor grader/ Paver on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- By Mix in Place Method and Grading - III Material	MORTH 401	Cubic Metre	1542	29

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119	Road Sub Base and Base Course	3.07	MORTH 403	Lime, Fly ash Stabilized Soil Sub-Base -- Construction of Sub-base using lime - Fly ash admixture with granular soil, free from organic matter/ deleterious material or clayey silts and low plasticity clays having PI between 5 and 20 and liquid limit less than 25 and commercial dry lime, slaked at site or pre-slaked with CaO content not less than 50 per cent, Fly ash to conform to gradation as per clause 4.3 of IRC: 88-1984, lime + Fly ash content ranging between 10 to 30 per cent, the minimum un-confined compressive strength and CBR value after 28 days curing and 4 days soaking to be 7.5Kilogram/sq. cm and 25 per cent respectively, all as specified in IRC: 88-1984.	MORTH 403	Cubic Metre	1032	10
	Road Sub Base and Base Course	3.08	MORTH 403	Cement Treated Crushed Rock or combination as per clause 403.2 and table 400.4 in Sub base/ Base --Providing, laying and spreading Material on a prepared sub grade, adding the designed quantity of cement to the spread Material, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base/base course.				
120	Road Sub Base and Base Course	a	MORTH 403	A) For Sub-base Course	MORTH 404	Cubic Metre	2121	29
121	Road Sub Base and Base Course	b	MORTH 403	B) For Base Course	MORTH 404	Cubic Metre	2032	29
122	Road Sub Base and Base Course	3.09	MORTH 305.4.3	Scarifying the existing granular road surface to a depth of 50 mm and disposal of scarified material within all lifts and leads upto 1000 metres.	MORTH 501.8.2.1	Square Metre	42	35
123	Road Sub Base and Base Course	3.10	MORTH 202	Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately etc. complete.	MORTH 202	Cubic Metre	375	211
124	Road Sub Base and Base Course	3.11	MORTH 202	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately etc. complete.	MORTH 202	Cubic Metre	1001	158
125	Road Sub Base and Base Course	3.12	MORTH 501.8	Making 50 mm x 25 mm furrows, 45 degree to the center line of the road and at one metre interval in the existing thin bituminous wearing coarse including sweeping and disposal of excavated material within 1000 metres lead	MORTH 404.3.1	Square Metre	8	7
126	Road Sub Base and Base Course	3.13	MORTH 501.8	Making 50 mm x 50 mm furrows, 45 degree to the center line of the road and at one metre interval in the existing thin bituminous wearing coarse including sweeping and disposal of excavated material within 1000 metres lead	MORTH 404.3.1	Square Metre	15	14

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127	Road Sub Base and Base Course	3.14		Brooming the W.B.M. surface by wire Brushes, coir brushes, dusting, cleaning etc. for receiving the bituminous treatment complete. Brooming the water Bound Macadam surface by wire.		Square Metre	16	16
128	Road Sub Base and Base Course	3.18	MORTH 404	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Vibratory roller. to the required density. By Mechanical Means - Grading I (Using Screening Type A (13.2) mm Aggregate)	MORTH 404	Cubic Metre	1876	34
129	Road Sub Base and Base Course	3.19	MORTH 404	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means -Grading I (Using Screening Type B (11.2 mm) Aggregate)	MORTH 404	Cubic Metre	1843	34
130	Road Sub Base and Base Course	3.20	MORTH 404	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading II (Using Screening Type B (11.2 mm) Aggregate)	MORTH 404	Cubic Metre	1843	34
131	Road Sub Base and Base Course	3.21	MORTH 405	Crushed Cement Concrete Sub-base / Base - Breaking and crushing of material obtained by breaking damaged cement concrete slabs to size range not exceeding 75 mm as specified in table 400.7 transporting the aggregates obtained from breaking of cement concrete slabs at a lead of 1 km., laying and compacting the same as sub base/ base course, constructed as WBM to clause 404 except the use of screening or binding material.	MORTH 405	Cubic Metre	359	205
132	Road Sub Base and Base Course	3.22	MORTH 405.2	Penetration Coat Over Top Layer of Crushed Cement Concrete Base -- Spraying of bitumen over cleaned dry surface of crushed cement concrete base at the rate of 25Kilogramper 10 Square Metre by a bitumen pressure distributor, spreading of key aggregates at the rate of 0.13 cum per 10 Square Metre by a mechanical gritter and rolling the surface as per clause 506.3.8	MORTH 405.2	Square Metre	21	2

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133	Road Sub Base and Base Course	3.23	MORTH 406	Wet Mix Macadam -- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver.	MORTH 406	Cubic Metre	1748	38
134	Road Sub Base and Base Course	3.24	MORTH 410	Crusher Run Macadam Base -- Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base -- By Mix in Place Method for 53 mm maximum size	MORTH 410	Cubic Metre	1577	24
135	Road Sub Base and Base Course	3.25	MORTH 410	Crusher Run Macadam Base -- Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base -- By Mix in Place Method for 45 mm maximum size	MORTH 410	Cubic Metre	1577	24
136	Road Sub Base and Base Course	3.26	MORTH 410	Crusher Run Macadam Base -- Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base -- By Mixing Plant Method for 53 mm maximum size	MORTH 410	Cubic Metre	1790	22
137	Road Sub Base and Base Course	3.27	MORTH 410	Crusher Run Macadam Base -- Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base -- By Mixing Plant Method for 45 mm maximum size	MORTH 410	Cubic Metre	1790	22
138	Road Sub Base and Base Course	3.28	MORTH 202	Dismantling of existing B.T. Surface (flexible Pavement) to a depth of 50 mm. manually including loading of dismantled material to transport vehicle at site excluding lead charges	MORTH 202	Square Metre	25	21
139	Road Sub Base and Base Course	3.29	MORTH 502	Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 0.60 Kilogram/Square Metre using mechanical means.	MORTH 502	Square Metre	21	1
140	Road Sub Base and Base Course	3.30	MORTH 503	Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen set footed in bitumen boiler on B.T. surface 2.5 Kilogram/10 Square Metre.(VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 503	Square Metre	11	1
141	Road Sub Base and Base Course	3.31	MORTH 503	Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen with sprayer on Dry / Hungry B.T. surface 3 Kilogram/10 Square Metre. (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 503	Square Metre	12	1

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142	Road Sub Base and Base Course	3.32	MORTH 503	Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on Granular surface treated with primer @ 2.75 Kilogram/10 Square Metre(VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 503	Square Metre	11	1
143	Road Sub Base and Base Course	3.33	MORTH 503	Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on Concrete surface treated with primer @ 3.25 Kilogram/10 Square Metre (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 503	Square Metre	13	1
144	Road Sub Base and Base Course	3.34	MORTH 503	Providing and applying tack coat with bitumen emulsion (RS1) using emulsion pressure distributor at the rate of 0.20Kilogramper Sq.M. on the prepared bituminous cleaned with mechanical broom	MORTH 503	Square Metre	9	1
145	Road Sub Base and Base Course	3.35a	MORTH 505	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone metal layers 30% crusher broken metal + 70% Hand broken (by breaking rubble obtained by blasting) heating and spraying the bitumen of specified grade @ 2 Kilogram/Square Metre, spreading 12 mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	175	3
146	Road Sub Base and Base Course	3.35b	MORTH 505	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone metal layers 100% crusher broken metal with conical crusher plant heating and spraying the bitumen of specified grade @ 2 Kilogram/Square Metre, spreading 12 mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	192	3
147	Road Sub Base and Base Course	3.36a	MORTH 505	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone layers metal 30% crusher broken metal + 70% Hand broken metal (By breaking Rubble obtained by blasting) , heating and spraying the bitumen of specified grade @ 2Kilogram/Square Metre , spreading 12mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc.complete, including applying tack coat of specified grade of bitumen at the rate of 0.30KilogramSquare Metre. on existing bitumen surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	185	3

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
148	Road Sub Base and Base Course	3.36b	MORTH 505	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone layers metal 100% crusher broken metal with conical crusher plant , heating and spraying the bitumen of specified grade @ 2Kilogram/ Square Metre , spreading 12mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc.complete, including applying tack coat of specified grade of bitumen at the rate of 0.30KilogramSquare Metre. on existing bitumen surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	202	3
149	Road Sub Base and Base Course	3.37a	MORTH 505	Providing and constructing 50 mm. thick Modified Penetration Macadam (MPM) road surface including all mataerials, preparing the existing road surface, spreading 40mm. stone metal layers 30% crusher broken metal + 70% Hand broken (by breaking rubble obtained by blasting) heating and spraying the bitumen of specified grade @ 1.75 Kilogram/Square Metre, spreading 12mm.size chips compacting with static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface.(VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	136	3
150	Road Sub Base and Base Course	3.37b	MORTH 505	Providing and constructing 50 mm. thick Modified Penetration Macadam (MPM) road surface including all mataerials, preparing the existing road surface, spreading 40mm. stone metal layers 100% crusher broken metal with conical crusher plant heating and spraying the bitumen of specified grade @ 1.75 Kilogram/Square Metre, spreading 12mm.size chips compacting with static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface.(VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	147	3
151	Road Sub Base and Base Course	3.38a	MORTH 505	Providing and constructing 50 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40mm. stone layers metal 30% crusher broken metal + 70% Hand broken metal (By breaking Rubble obtained by blasting) , heating and spraying the bitumen of specified grade @ 1.75Kilogram/ Square Metre, spreading 12mm.size chips compacting with Static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc.complete, including applying tack coat of bitumen 0f specified grade at the rate of 0.30KilogramSquare Metre.(on existing bitumen surface.)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	147	2

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
152	Road Sub Base and Base Course	3.38b	MORTH 505	Providing and constructing 50 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40mm. stone layers metal 100% crusher broken metal with conical crusher palnt, heating and spraying the bitumen of specified grade @ 1.75Kilogram/ Square Metre, spreading 12mm.size chips compacting with Static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc.complete, including applying tack coat at the rate of 0.30KilogramSquare Metre.on existing bitumen surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	IRC-SP-20, 2002 Clause Number 8.7.3	Square Metre	158	2
153	Road Sub Base and Base Course	3.39	MORTH 506	Providing, laying and compacting of Built-up-spray grout layer 75 mm thick over prepared base consisting of two layers composite construction of compacted crushed coarse aggregates with application of bituminous binder of biyumen of specified Grade @ 1.520 Kilogram/ Square Metre after each layer, (i.e 1.520x2=3.04 say 3.00 Kilogram/Square Metre) and with key aggregates placed on top of the second layer and compacting with static roller 8 to 10 MT. Excluding cost of tack coat and scarifying etc. Complete.(VG-30 bulk bitumen rates are considered to arrive at rates)	IRC- 47	Square Metre	235	3
154	Road Sub Base and Base Course	3.40	MORTH 504	BITUMINOUS MACADAM: Proving and laying bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 80/100 mm compacted thickness with 3.3 % using specified grade of Bitumen. -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, vibratory roller.(VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 504	Cubic Metre	4766	39
155	Road Sub Base and Base Course	3.42	MORTH 504	BITUMINOUS MACADAM:--Providing and laying bituminous macadam using crushed aggregate of Grading 1, premixed with bituminous binder, transported at site with VTS, laid over a previously prepared surface , finished to the required grade ,level, alignment,and rolling to achieve the desired density for 80/100 mm compacted thickness with drum mix type hot mix plant with SCADA having complying essential features of Hot mix plant as per IRC-27 2009 specified conditions and attachments such as electronic load sensor based belt conveyers,automatic synchronization of bitumen and aggregate fedder,built in dust controller system and PLC for Drum Mix plant ,Sensor paver,and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen 3.30% of specified grade (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 504	Cubic Metre	4398	39

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
156	Road Sub Base and Base Course	3.44	MORTH 505	DENSE BITUMINOUS MACADAM: Providing and laying dense bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder of specified grade of Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 76-100 mm compacted thickness .USING Batch mix type hot mix plant with SCADA, Sensor Paver, Vibratory roller with Stone Dust filler.(VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 507	Cubic Metre	6268	41
157	Road Sub Base and Base Course	3.46	MORTH 505	DENSE BITUMINOUS MACADAM:--Providing and laying dense bituminous macadam using crushed aggregate of grading 1, premixed with bituminous binder Bitumen of specified grade,@ 4.50 % by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface , finished to the required grade ,level, alignment,and rolling to achieve the desired density for 76/100 mm compacted thickness with drum mix type hot mix plant with SCADA having complying essential features of Hot mix plant as per IRC-27-2009 specified conditions and attachments such as electronic load sensor based belt conveyers, automatic synchronization of bitumen and aggregate fedder,built in dust controller system and PLC for Drum Mix plant ,Sensor paver, and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen VG-30 grade with stone dust filler (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 507	Cubic Metre	5728	41
158	Road Sub Base and Base Course	3.48	MORTH 507	BITUMINOUS CONCRETE:- Providing and laying bituminous concrete using crushed aggregates of grading 1, premixed with bituminous binder @ 5.20 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50 mm compacted thickness with specified grade of Bitumen,Excluding prime / tack coat. For Bitumen of specified grade -- USING Batch mix type hot mix plant with SCADA, Sensor Paver, Vibratory roller with Stone Dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 509	Cubic Metre	6696	42
159	Road Sub Base and Base Course	3.50	MORTH 507	BITUMINOUS CONCRETE:--Providing and laying bituminous concrete using crushed aggregate of grading 1, premixed with bituminous binder @5.40% by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface, finished to the required grade ,level, alignment, and rolling to achieve the desired density for 50mm compacted thickness with drum mix plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen of specified grade with stone dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 509	Cubic Metre	6512	42

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
160	Road Surfacing Course	4.01	MORTH 511	Providing bituminous Type A liquid seal coat on bituminous surface including supplying all materials and bitumen of specified grade preparing existing road surface, heating and applying bitumen @ 0.98 Kilogram/Square Metre. by mechanical means, spreading chips and rolling, by static roller having weight 8 to 10 MT. etc. complete. (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 513	Square Metre	45	1
161	Road Surfacing Course	4.03	MORTH 511	Providing and laying of Type - B premix seal coat with HMP of appropriate crushed stone chipping 6.70 mm size and penetration bitumen of specified grade @ 0.68 Kilogram/ Square Metre. , preparing existing road surface including mixing in suitable Batch Mix plant and rolling by static roller having weight 8 to 10 MT. etc. complete. (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 513	Square Metre	35	1
162	Road Surfacing Course	4.04	MORTH 509	Surface Dressing -- Providing and laying surface dressing as wearing course in single coat using crushed stone aggregates of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller. -- a) 19 mm nominal chipping size (bitumen 12.00 Kilogram/10 Sq.M.) -- Bitumen of specified grade (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 510	Square Metre	61	1
163	Road Surfacing Course	4.05	MORTH 510	Surface Dressing -- Providing and laying surface dressing as wearing course in single coat using crushed stone aggregates of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller. -- b) 13 mm nominal chippling size (bitumen 10.00 Kilogram/10 Sq.M -- Bitumen of specified grade (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 510	Square Metre	48	1
164	Road Surfacing Course	4.06	MORTH 510	Surface Dressing -- Providing and laying surface dressing as wearing course in single coat using crushed stone aggregates of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller. -- c) 10 mm nominal chippling size (bitumen 9.0 Kilogram/10 Sq.M -- Bitumen of specified grade (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 510	Square Metre	45	1
165	Road Surfacing Course	4.07	MORTH 509	Surface Dressing -- Providing and laying surface dressing as wearing course in single coat using crushed stone aggregates of specified size on a layer of bituminous binder laid on prepared surface and rolling with 8-10 tonne smooth wheeled steel roller. -- d) 6 mm nominal chippling size (bitumen 7.50 Kilogram/10 Sq.M -- Bitumen of specified grade (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 510	Square Metre	40	1

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
166	Road Surfacing Course	4.11	MORTH 510	Open Graded Premix Surfacing- Providing and Laying OGC 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates premixed with bituminous binder transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction but excluding prime / tack and Seal coat. For Bitumen of specified grade--USING drum mix type hot mix plant with SCADA, Paver and Vibratory roller(over BT Surface) (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 511	Square Metre	121	5
167	Road Surfacing Course	4.12	MORTH 510	Open Graded Premix Surfacing- Providing and Laying OGC 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates premixed with bituminous binder transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction but excluding prime / tack and Seal coat. For Bitumen of specified grade--USING drum mix type hot mix plant with SCADA, Paver and Vibratory roller (Over MPM Surface) (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 511	Square Metre	124	5
168	Road Surfacing Course	4.13	MORTH 511	9 MM SEAL COAT: Providing and laying of Type A 9mm premix seal coat with HMP of appropriate capacity crushed stone chipping 6.7 mm size and penetration bitumen of specified grade @ 1.2Kilogram/Sq.m, preparing existing road surface by mechanical means, spreading chips and rolling, by static roller having weight 8 to 10 MT. etc. complete.(VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 513	Square Metre	65	6
169	Rigid Pavement	5.01	MORTH 602	Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate(VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver,compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6037	191

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
170	Rigid Pavement	5.02	MORTH 602	Providing and laying in-situ M35 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6145	191
171	Rigid Pavement	5.03	MORTH 602	Providing and laying in-situ M40 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6421	191
172	Rigid Pavement	5.04	MORTH 602	Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6100	928

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
173	Rigid Pavement	5.05	MORTH 602	Providing and laying in-situ M35 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6208	928
174	Rigid Pavement	5.06	MORTH 602	Providing and laying in-situ M40 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6292	928
175	Rigid Pavement	5.07	MORTH 602	Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement with max 20% fly Ash (Fly-ash upto 20% by weight of Cement) over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	6409	195

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
176	Rigid Pavement	5.08	MORTH 602	Providing and laying in-situ M35 Grade unreinforced plain cement concrete pavement with max 20% fly Ash (Fly-ash upto 20% by weight of Cement) over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	5876	191
177	Rigid Pavement	5.09	MORTH 602	Providing and laying in-situ M40 Grade unreinforced plain cement concrete pavement with max 20% fly Ash (Fly-ash upto 20% by weight of Cement) over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	5889	191

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
178	Rigid Pavement	5.10	MORTH 602	Providing and laying in-situ M30 Grade unreinforced plain cement concrete pavement with max 20% fly Ash (Fly-ash upto 20% by weight of Cement) over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	5955	943
179	Rigid Pavement	5.11	MORTH 602	Providing and laying in-situ M35 Grade unreinforced plain cement concrete pavement with max 20% fly Ash (Fly-ash upto 20% by weight of Cement) over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	5981	952
180	Rigid Pavement	5.12	MORTH 602	Providing and laying in-situ M40 Grade unreinforced plain cement concrete pavement with max 20% fly Ash (Fly-ash upto 20% by weight of Cement) over a prepared sub base with 43 grade cement , coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a Tilting type Concrete Mixer as per approved mix design, admixtures, spreading, laying compacting and finished in a continuous operation without paver machine, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6m X 0.6m centre to centre, admeasuring 80 mm at bottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.	MORTH 602	Cubic Metre	5995	952

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
181	Rigid Pavement	5.13	MORTH 601	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, , cement content not to be less than 150 Kilogram/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant/ Weigh batch mixer, transported to site with all leads and lifts, laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge , compacting with vibratory roller, finishing, curing and including preparation of sub-grade surface if required etc. complete.	MORTH 601	Cubic Metre	3240	45
182	Rigid Pavement	5.14	MORTH 602.6.5	Providing and fixing in position TMT FE 500, 32 mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and PVC pipe of 40 mm dia wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete.	RD	Number	411	143
183	Rigid Pavement	5.15	MORTH 602.6.5	Providing and fixing in position TMT FE 500, 25mm dia dowel bars precoated with anticorrosive epoxy paint of required Dia. 60 cms. Long and at 30.00 cm. C/C and PVC pipe of 32 mm dia wherever directed including handling, straightening, necessary cutting supported by TMT FE 500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half length with bituminous paint as directed etc. complete.	RD	Number	329	143
184	Rigid Pavement	5.16	MORTH 602.6.4.2	Providing and fixing in position TMT FE 500, tie bars precoated with anticorrosive epoxy paint of 12 mm dia. 70 cms.long and at 30.00 cm. C/C and wherever directed including handling, straightening wrapping with paper of approved quality for half length, necessary cutting, handling, straightening , supported by assembly of TMT FE 500, chairs with proper alignment etc. complete.	RD	Number	233	143
185	Rigid Pavement	5.17	MORTH 602.6.3	Cutting transverse contraction joints 3 to 4 mm wide and depth 60mm. .in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etc. complete including subsequent widening of the groove 8 to 10 mm. wide at top having depth of 15 mm. as directed by Engineer incharge.	RD	Running Metre	71	17

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
186	Rigid Pavement	5.18	MORTH 602.6.4.2	Providing to contraction joints polysuphide sealent (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealent reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (appraox. 25% larger than the initial 3 mm.to 4 mm. joint) overlaid with bond breaking tape as per detailed drawing. Item includes cleaning the joints with water jet / air compressor and allowing joint to become thoroughly dry before sealent is applied and applying primer. (A) Contraction and longitudinal joints (15 mm. deep x 8 mm.wide)	RD	Running Metre	150	27
187	Rigid Pavement	5.19	MORTH 602.5	Providing and laying 125 micron Low Density Polyethylene (LDPE) sheet confirming to IS 3395 : 1997 below concrete pavement including all materials and labour complete.	RD	Square Metre	21	7
188	Rigid Pavement	5.20	As directed by Engineer Incharge	Providing and fixing factory made Hydraulically pressed Mechanically vibrated and compacted precast inter locking cement concrete paving blocks 80MM thick in M-40 grade of approved size and shape for City streets, small /medium market roads,low volume roads, utility cuts on arterial roads etc. as specified and as per IS 15658:2006 including cost of all materials, manufacturing, curing, transportation of blocks to work site including loading, unloading and stacking as directed, laying paving blocks in position over prepared bed of VSI crushed sand of 50 mm thickness including necessary excavation in all stratas, spreading blindge of fine sand over the prepared bed, compacting blocks by plate vibrator etc. complete.	IRC-SP-63	Square Metre	1077	91
189	Rigid Pavement	5.21	As directed by Engineer Incharge	Providing and fixing factory made Hydraulically pressed Mechanically vibrated and compacted precast inter locking cement concrete paving blocks 100MM thick in M-50 grade of approved size and shape for City streets and roads with high volume/ heavy traffice as specified and as per IS 15658:2006 including cost of all materials, manufacturing, curing, transportation of blocks to work site including loading, unloading and stacking as directed, laying paving blocks in position over prepared bed of VSI crushed sand of 50 mm thickness including necessary excavation in all stratas, spreading blindge of fine sand over the prepared bed, compacting blocks by plate vibrator etc. complete.	IRC-SP-63	Square Metre	1094	108
190	Rigid Pavement	5.22 a	As directed by Engineer Incharge	Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with bitumen (excluding reinforcement) with coarse and fine aggregate (VSI grade finely washed crushed sand) etc. complete	MORTH 602	Cubic Metre	7340	1870

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
191	Rigid Pavement (New item)	5.22 b	As directed by Engineer Incharge	Providing and laying in situ cement concrete M -30 with tremix treatment for 200 mm thickness for Concrete Road is including laying plastic sheet for 125 micron thickness with groove cutting of 4 mm wide and 20 mm deep with necessary refilling with polysuphide sealent (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealent reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (excluding reinforcement) with coarsen and fine aggregate Using V.S.I.Quality Artifitial Sand etc. complete	MORTH 602	Cubic Metre	7336	1870

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Road Furniture	6.01	MORTH 807	Providing and fixing trap/ granite/ quartzite/ gneiss guard stone/ indicator stones/ boundary stones of standard size and shape including fixing in block of ____ standard size with white washing etc.complete				
192	Road Furniture	a	MORTH 807	Fixing in Block of Standard Size of CC 1:4:8	MORTH 807	Number	Deleted	Deleted
193	Road Furniture	b	MORTH 807	Fixing In Ground	MORTH 807	Number	Deleted	Deleted
194	Road Furniture	c	MORTH 807	Fixing in M-15 R.C.C. 1:4:8	MORTH 807	Number	Deleted	Deleted
	Road Furniture	6.02	MORTH 805	Providing and fixing _____ metre stones as per I.R.C. standard including fixing in standard size _____ block including curing, painting lettering etc. complete.				
195	Road Furniture	a	MORTH 805	RCC 200 meter Stoen in CC 1:4:8	MORTH 805	Number	871	270
196	Road Furniture	b	MORTH 805	Fixing 1:2:4 ordinary km. stones in C.C. 1:4:8	MORTH 805	Number	2739	726
197	Road Furniture	c	MORTH 805	Fixing R.C.C. 5th Km. stones, in c.c. 1:4:8	MORTH 805	Number	4615	1307
	Road Furniture	6.03	MORTH 202	Dismantling of _____Stone including cutting of earth, foundation and disposal of dismantled material with all lifts and lead upto 1000 m and back filling of pit.				
198	Road Furniture	a	MORTH 202	Dismantling 5th Km. Stone	MORTH 805	Number	666	501
199	Road Furniture	b	MORTH 202	Ordinary Km. Stone	MORTH 805	Number	394	292
200	Road Furniture	c	MORTH 202	Hectometer Stone	MORTH 805	Number	79	58
	Road Furniture	6.04	MORTH 805.1	Painting with approved enamel paint in two coats including cleaning surface and lettering for _____ stone etc. complete.				
201	Road Furniture	a	MORTH 805.1	200 Mt. Stone	MORTH 805.1	Number	126	95
202	Road Furniture	b	MORTH 805.1	Ordinary Kilometer Stone	MORTH 805.1	Number	457	301
203	Road Furniture	c	MORTH 805.1	Lettering of Fifth Km. Stone	MORTH 805.1	Number	484	246
204	Road Furniture	d	MORTH 805.1	Lettering of Boundary Stone	MORTH 807	Number	40	19
205	Road Furniture	e	MORTH 801	Lettering for cautionary/ mandatory sign boards and village name boards	MORTH 801	Number	190	121
206	Road Furniture	f	MORTH 801	Lettering for informatory sign boards etc. complete.	MORTH 801	Number	236	153
207	Road Furniture	g	MORTH 801	Lettering on masonry works with nalla flow direction, span number and location etc. complete.	MORTH 801	Number	27	16
208	Road Furniture	6.05	MORTH 801	Painting letters upto 20 cm height complete brushes, coir brushers, dusting, cleaning, including cost of paint etc. complete.	MORTH 801	Number	27	21
209	Road Furniture	6.06	MORTH 801	Painting and numbering trees with white backKilogramround and black lettering etc. complete.	MORTH 801	Number	29	23
210	Road Furniture	6.07	MORTH 801	Providing white and colour washing to road side trees in 2 coats in 2 bands of white and one red band at centre of 30 cm height each including preparing the surface, cost of material, conveying etc. complete.	MORTH 801	Number	47	33

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Road Furniture	6.08	MORTH 801	Painting Line, Dashes, Arrows etc on Roads in two coats on new work with ready mixed road marking paint confirming to I.S. 164 on Bituminous surface including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control (Over/Upto __cm wide) (MORTH-803) --_____ Surface				
211		a	MORTH 801	Over 10cm Wide On New Surface	MORTH 803	Square Meter	323	132
212	Road Furniture	b	MORTH 801	Upto 10 cm Wide On Old Surface	MORTH 803	Square Meter	292	106
213		c	MORTH 801	Over 10cm Wide On Old Surface	MORTH 803	Square Meter	216	96
214	Road Furniture	d	MORTH 801	Upto 10 cm Wide On Old Surface	MORTH 803	Square Meter	228	106
215	Road Furniture	6.09	MORTH 806	Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000Kilogramtested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kilogram. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer.	MORTH 804	Number	489	78

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
216	Road Furniture	6.10	MORTH 806	Providing and Fixing of Median Marker that are made of tough, high impact resistant, injection-molded, thermoplastic body with an isosceles trapezoidal structure of length, width and height not less than 15cm, 10cm and 10cm respectively and thickness not less than 1.8mm, the body structure shall be rounded at its acute angle, all the corners and edges. The plastic used for molding the Median Marker shall have a minimum Notched Izod Impact strength value of 600 J/m at room temperature, when tested in accordance with ASTM D256 and shall retain at least 70% of this value when subjected to accelerated weathering for 1000hrs as per ASTM G155 or UL746C. The logo of the manufacturer shall be embossed on either side of the body in the injection molding process. The Median Marker shall have rectangular-shaped, fluorescent yellow color retro-reflective sheeting of size not less than 8.5cm*8.5cm and with fully reflective micro prismatic cube corners as its retro-reflective elements as per IRC 67 2010 and ASTM D4956 type XI specifications reflectivity values. The retro-reflective sheeting shall be one or both sides of the Median Marker and shall be edge protected with no exposed edges which will prevent edge lifting, vandalism, sheeting damage, etc. The Median Marker shall be fixed by a combination of epoxy adhesive and grouting.	MORTH 806	Number	683	26
217	Road Furniture	6.11	MORTH 804	Providing and fixing reflective fluorescent tape on old road sign board by following the procedure recommended by manufacturer. Tape shall be consist of white or coloured sheeting having smooth outer surface which has the property of retro-reflection over its entire surface. It shall be weather resistant and show colour fastness. It shall be new and unused and shall show no evidence of cracking, scaling, pitting, blistering, edge lifting and shall have negligible shrinkage or expansion including cleaning / scraping and painting of existing board etc. complete. (Guidance on the recommended application of each class of tape may be taken from IRC-67)	MORTH 804	Square Meter	6037	1806
218	Road Furniture	6.12a	MORTH 803.4	Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per Square Metre area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes. complete.	MORTH 803.4	Square Meter	666	27
219	Road Furniture (New item)	6.12 b	MORTH 803.4	Providing and applying Cold plastic paint two component rolled on surfacing material solvent free, high build two pack seamless, tough, skid resistant, material with has property of attaining 2.00mm thickness in single coat application white (or as required colour) based on glass and colour retaining acrylic cross linking resin system for coloured road surfacing including surface cleaning and cost of all material etc. complete. (All inclusive on bitumen or concrete surface) work shall carried out as per IRC 35-2015 clause 2.2)	MORTH 803.4	Square Meter	1518	53

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
220	Road Furniture	6.13	MORTH 806	Providing and fixing Aluminum-backed flexible prismatic (AFP) sheeting consisting Yellow colored flexible prismatic sheeting with non-metallic prismatic lens as Retroreflective elements and conforming to ASTM D 4956-09 Type VI specification for rebound able Retroreflective sheeting. This flexible prismatic sheeting shall be of 1ft width and laminated at the back with a 50 micron Aluminum (Al) foil with pressure sensitive adhesive and liner. Further, this flexible prismatic sheeting shall have screen printed arrow/slant line pattern in black color in a continuous roll format. Neither AFP sheeting nor the flexible prismatic sheeting used in it shall crack when slowly bent in 1 second time around a 1/8th inch mandrel after being conditioned for 24hrs at 0°C and tested as per section S2.2.2. of ASTM D 4956-09. The AFP sheeting, with the liner removed, shall be applied with a neoprene contact adhesive with a Polychloroprene as base, viscosity of 200-450 cps and solid content of 20-30%. Once applied, the edges of the product shall be sealed all around with a two-part epoxy based structural adhesive and shall be extremely resistant to peel-off. A test report from institutes like ARAI/CRRRI confirming to above mentioned flexibility and ASTM-D4956-09 Type-VI retro reflectivity performance of the flexible prismatic sheeting used in AFP shall be submitted by the tenderer during prequalification and supply of material.	MORTH 806	Square Meter	7841	358
221	Road Furniture	6.14	MORTH 806	Providing Vertical Delineator having wide angle cube corner micro prismatic non metallic reflective sheeting confirming to Type XI of ASTM D4956 -09 with White Color and Red Color combination and having minimum of retro reflective exposed area of 125 Sq CM on top slots and 35 Sq CM on bottom slots and no edges shall be exposed for tampering. This tubular delineator shall have a core and shell construction, shell shall be made of tough, high impact resistant, injection-molded, thermoplastic outer body and the inner core shall consist of powder coated or painted Mild steel of minimum thickness 1.0mm.and core-shell structure shall be of height not less than 800 mm above the ground and width not less than 80 mm. The metallic core of the delineator shall extend 300mm beyond the shell length from bottom for installing in the ground. The extended portion shall have slots to insert anchoring rods for enhancing the concrete grip. The logo of the manufacturer shall be embossed on either side of the body in the injection molding process. The engineering thermoplastic used for making the delineator body shall have minimum initial mechanical properties of 600J/m tested in accordance with ASTM D256 and shall retain at least 70% of these minimum initial values when subjected to accelerated weathering for 1000hrs as per ASTM G155 or UL 746C and as per IRC 79 specifications and including fixing the unit in M20 Grade Cement Concrete of Size 30x30x40 cm including excavation for pit.	MORTH 806	Number	2943	431
222	Road Furniture	6.15	MORTH 806	Road Delineators: Supplying and installation of delineators (Roadway Indicators, Hazard markers, Object markers) 80 to 100 cm high above ground level, painted black and white in 15 cm wide strips, fitted with 80x100mm rectangular or 75mm dia. Circular reflectorised panels at the top, buried or pressed into the ground and confirming to I.R.C. 79 and the drawings	MORTH 806	Number	1047	21

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
223	Road Furniture	6.16	MORTH 806	Providing and fixing steel pipe delineators of 10 cm. in diameter and total height of 130 cm, provided with 2 strips of white retroreflective sheeting of size 5 cm. x 32.5 cm. each fixed horizontally and 2 strips of red retroreflective sheeting each having size 5 cm. x 32.5 cm. fixed horizontally at top, with M.S. round cap having diameter 11 cm. and wire mesh at top (10 guage thick) and height of wire mesh 15 cm, M.S. hold fast 6 mm thick with 35 cm. in length, fixing the delineators in C.C. 1:4:8 concrete block of size 25 cm. x 25 cm. x 45 cm. with necessary excavation etc. complete.	MORTH 806	Number	1137	21
224	Road Furniture	6.17	MORTH 804	Supplying of Solar Raised Pavement Markers made of polycarbonate molded body with circular shape, solar powered, LED self illumination in active mode, 360 degree illumination and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face in passive mode. The marker shall support a load of 20000Kilogramtested in accordance to ASTM D 4280. The marker should be resistant to dust and water ingress according to IP 65 standards and should withstand temperatures in the range of 0 C to 70 C. Color of lighting could be provided in red or yellow (amber) as per requirement and typical frequency of blinking is 1 Hz. There should be current losses of less than 20 micro-amperes at 2.4 V in sleep-charging mode to enhance the life of the marker and a full charge should provide for a minimum autonomy of 50 hours. The height, width and length of the marker shall not be less than 10 mm x 100 mm x 100 mm. Also, the surface diameter of the marker shall not be less than 100 mm respectively. The weight of the marker shall not exceed 0.5 Kilograms. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer.	MORTH 804	Number	3990	150
225	Road Furniture	6.18	MORTH 806	Supplying precast conventional reflective delinators on four sides for road signs	MORTH 806	Number	584	132
226	Road Furniture	6.19	MORTH 801	Fixing in position Cautionary/ Mandatory sign boards in ground with C C 1:4:8 block of 60cm x 60cm x 75cm size etc. complete as directed including all leads.	MORTH 801	Number	928	118
227	Road Furniture	6.20	MORTH 801	Fixing in position Road Junction/ Informatory Sign Board in ground with C.C.1:4:8 block of 60cm x 60cm x 75cm size including all leads complete.	MORTH 801	Number	1857	237
228	Road Furniture	6.21	MORTH 806	Providing and fixing including conveyance charges upto a distance of 200 Km. precast concrete post delinators, post of size 130 x 90 x 1300 milimetre consisting of 4 B.T. wires with 14,000 Kilogram/cm2 C.C. M-20 grade 16mm dia. hold fast, including excavation and C.C. 1:4:8 foundation block, oil painting post with 3 coats and Red fluorescent tape 75 x 75mm and white floursent border 20mm wide around the red tape on all the four sides with necessary adhesive and lamination etc. complete.	MORTH 806	Number	707	134

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
229	Road Furniture	6.22	MORTH 801	Supplying rolled steel channel post of 100 x 50 mm (ISMC) drilled on top and painted with one coat of epoxy primer and two coats of epoxy finish paint having black and white bands of 25 cm last part of the post 0.75 m below ground level is painted with three coats of red lead paint with 2 nos. of high tensile G.I. bolt and nut of size 10 mm Dia. of 25 mm long including transportation etc. complete. Spec. Number : As per IRC-67, and M.O.R.T. and H. Circular Number RW/NH-33023/31/88 D.O.III Dated 2-5-1994	MORTH 801	Running Metre	1204	202
230	Road Furniture	6.23	MORTH 801	Supplying M.S. Angle iron post of size 65 mm x 65 mm x 6 mm drilled on top and painted with one coat of epoxy primer and two coats of epoxy finish paint having black and white bands of 25 cm, last part of the post 0.75 m below ground level is painted with three coats of red lead paint with 2 nos. of high tensile G.I. bolt and nut of size 10 mm dia. of 25 mm long including transportation etc. complete. Spec. Number : As per IRC-67, and M.O.R.T. and H. Circular Number RW/NH-33023/31/88 D.O.III Dated 2-5-1994	MORTH 801	Running Metre	1155	253
	Road Furniture	6.24	MORTH 801	Supplying M.S. Angle iron post of size _____ duly painted with one coat of red oxide paint and two coats of synthetic enamel finish paint having black and white bands of 25 cm width including 2 nos of G.I. bolt and nut of size 10 mm dia. And 20 mm long including transportation etc. complete. Spec. Number : As per IRC-67, and M.O.R.T. and H. Circular Number RW/NH-33023/31/88 D.O.III Dated 2-5-1994				
231	Road Furniture	a		Post of size 65 mm x 65 mm x 6 mm	MORTH 801	Running Metre	656	161
232	Road Furniture	b	MORTH 801	Post of size 50 mm x 50 mm x 5 mm	MORTH 801	Running Metre	458	161
233	Road Furniture	6.25	MORTH 801	Supplying M.S. Angle iron frame for informatory sign boards of size 35 mm x 35 mm x 3 mm welded and making neccessary holes required for fixing and painted with one coat of epoxy primer and two coats epoxy finish paint etc. complete.Spec. Number : As per IRC-67, and M.O.R.T. and H. Circular Number RW/NH-33023/31/88 D.O.III Dated 2-5-1994	MORTH 801	Running Metre	346	161
	Road Furniture	6.26	MORTH 805	Providing and constructing Information Pillar of Brick Masonry in C.M. 1:6 of size 2.0 m x 0.23m x 1.0 m with base pedestal of size 2.3 m x 0.35 m x 0.45 m (0.3 m above ground), excavtion in ground upto 0.4 m, laying 0.15 m thick 80 mm soling,0.10 m thick c.c. 1:3:6, finishing the pedestal and pillar in cement plaster 12 mm thick in C.M. 1:5 and finishing the pillar with neat cement finish ,applying flat oil paint of approved colour in two coats, including curing, finishing etc complete.(In Strata/Soil _____) Spec. Number :As directed by Engineer-in-charge.				
234	Road Furniture	a	MORTH 805	In Strata other than B.C. Soil	MORTH 805	Number	12083	3589

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
235	Road Furniture	b	MORTH 805	In B.C. Soil with 12 mm thick R.C.C. raft in M-15, including reinforcement .	MORTH 805	Number	14082	3785
	Road Furniture	6.27	MORTH 801	Providing and fixing Mandatory/Regulatory sign boards in circular shape of _____ mm dia made out of _____mm aluminum sheet bonded with white retro reflective sheeting of Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one Number of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.				
236	Road Furniture	a	MORTH 801	600 mm dia made out of 1.5mm aluminum sheet	MORTH 801	Number	3747	344
237	Road Furniture	b	MORTH 801	750 mm dia made out of 2mm aluminum sheet	MORTH 801	Number	4740	344
238	Road Furniture	c	MORTH 801	900 mm dia made out of 2mm aluminum sheet	MORTH 801	Number	5824	344
239	Road Furniture	d	MORTH 801	1200 mm dia made out of 2mm aluminum sheet	MORTH 801	Number	8458	344
240	Road Furniture	e	MORTH 801	600 mm dia made out of 3mm aluminum composite material	MORTH 801	Number	4102	154
241	Road Furniture	f	MORTH 801	750 mm dia made out of 4mm aluminum composite material	MORTH 801	Number	5484	154
242	Road Furniture	g	MORTH 801	900 mm dia made out of 4mm aluminum composite material	MORTH 801	Number	6906	344
243	Road Furniture	h	MORTH 801	1200 mm dia made out of 4mm aluminum composite material	MORTH 801	Number	10368	344

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Road Furniture	6.28	MORTH 801	Providing and fixing Mandatory/Regulatory sign boards in circular shape of ____mm dia made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class C (Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one Number of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C (Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.				
244	Road Furniture	a	MORTH 801	600 mm dia made out of 1.5mm aluminum sheet	MORTH 801	Number	4682	344
245	Road Furniture	b	MORTH 801	600 mm dia made out of 3mm aluminum composite material	MORTH 801	Number	4863	344
246	Road Furniture	c	MORTH 801	750 mm dia made out of 2mm aluminum sheet	MORTH 801	Number	6210	344
247	Road Furniture	d	MORTH 801	750 mm dia made out of 4mm aluminum composite material	MORTH 801	Number	6953	344
248	Road Furniture	e	MORTH 801	900 mm dia made out of 2mm aluminum sheet	MORTH 801	Number	7962	344
249	Road Furniture	f	MORTH 801	900 mm dia made out of 4mm aluminum composite material	MORTH 801	Number	9044	344
250	Road Furniture	g	MORTH 801	1200 mm dia made out of 2mm aluminum sheet	MORTH 801	Number	13702	344
251	Road Furniture	h	MORTH 801	1200 mm dia made out of 4mm aluminum composite material	MORTH 801	Number	14142	344
	Road Furniture	6.29	MORTH 801	Providing and fixing Cautionary/Warning sign boards in Equilateral Triangle size of ____mm made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one Number of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.				
252	Road Furniture	a	MORTH 801	600 mm made out of 1.5mm aluminum sheet	MORTH 801	Number	3157	344

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
253	Road Furniture	b	MORTH 801	600 mm made out of 3mm aluminum composite material	MORTH 801	Number	3355	344
254	Road Furniture	c	MORTH 801	750 mm made out of 2mm aluminum sheet	MORTH 801	Number	3546	344
255	Road Furniture	d	MORTH 801	750 mm made out of 4mm aluminum composite material	MORTH 801	Number	3904	344
256	Road Furniture	e	MORTH 801	900 mm out of 2mm aluminum sheet	MORTH 801	Number	4306	344
257	Road Furniture	f	MORTH 801	900 mm made out of 4mm aluminum composite material	MORTH 801	Number	4899	344
258	Road Furniture	g	MORTH 801	1200 mm made out of 2mm aluminum sheet	MORTH 801	Number	5801	344
259	Road Furniture	h	MORTH 801	1200 mm made out of 4mm aluminum composite material	MORTH 801	Number	6856	344
	Road Furniture	6.30	MORTH 801	Providing and fixing Cautionary/Warning sign boards in Equilateral Triangle size of ____ mm made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class C (Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one Number of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. ClassC (Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.				
260	Road Furniture	a	MORTH 801	600 mm made out of 1.5mm aluminum sheet	MORTH 801	Number	3678	344
261	Road Furniture	b	MORTH 801	600 mm made out of 3mm aluminum composite material	MORTH 801	Number	3876	344
262	Road Furniture	c	MORTH 801	750 mm made out of 2mm aluminum sheet	MORTH 801	Number	4254	344
263	Road Furniture	d	MORTH 801	750 mm made out of 4mm aluminum composite material	MORTH 801	Number	4612	344
264	Road Furniture	e	MORTH 801	900 mm made out of 2mm aluminum sheet	MORTH 801	Number	5478	344
265	Road Furniture	f	MORTH 801	900 mm made out of 4mm aluminum composite material	MORTH 801	Number	6072	344
266	Road Furniture	g	MORTH 801	1200 mm made out of 2mm aluminum sheet	MORTH 801	Number	7885	344
267	Road Furniture	h	MORTH 801	1200 mm made out of 4mm aluminum composite material	MORTH 801	Number	8940	344

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Road Furniture	6.31	MORTH 801	Providing and fixing Cautionary/Warning sign boards in Octagone size of ____mm made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one Number of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.				
268	Road Furniture	a	MORTH 801	750 mm made out of 2mm aluminum sheet	MORTH 801	Number	5389	344
269	Road Furniture	b	MORTH 801	750 mm made out of 4mm aluminum composite material	MORTH 801	Number	6341	344
270	Road Furniture	c	MORTH 801	900 mm out of 2mm aluminum sheet	MORTH 801	Number	6721	344
271	Road Furniture	d	MORTH 801	900 mm made out of 4mm aluminum composite material	MORTH 801	Number	8090	344
	Road Furniture	6.32	MORTH 801	Providing and fixing Cautionary/Warning sign boards in Octagone size of ____ mm made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class C (Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one Number of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C (Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.				
272	Road Furniture	a	MORTH 801	750 mm made out of 2mm aluminum sheet	MORTH 801	Number	7269	344
273	Road Furniture	b	MORTH 801	750 mm made out of 4mm aluminum composite material	MORTH 801	Number	8221	344
274	Road Furniture	c	MORTH 801	900 mm made out of 2mm aluminum sheet	MORTH 801	Number	9426	344
275	Road Furniture	d	MORTH 801	900 mm made out of 4mm aluminum composite material	MORTH 801	Number	10795	344

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Road Furniture	6.33		Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area less than 0.9 square meter made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class __ (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on one Number mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixtures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty				
276	Road Furniture	a	MORTH 801	2mm aluminum sheet Class B	MORTH 801	Square Meter	7979	315
277	Road Furniture	b	MORTH 801	4mm aluminum composite material Class B	MORTH 801	Square Meter	9670	125
278	Road Furniture	c	MORTH 801	2mm aluminum sheet of Class C	MORTH 801	Square Meter	11319	315
279	Road Furniture	d	MORTH 801	4mm aluminum composite material Class C	MORTH 801	Square Meter	13009	125
	Road Furniture	6.34		Providing and fixing of retro- reflectorised informatory sign board rectangular/Square in shape having area greater than 0.9 square meter made out of ____mm aluminum sheet bonded with white retro reflective sheeting of Class __ (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3, supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with two coats of grey stove enamel paint and supported on two Number mild steel angle iron post 75 mm x 75 mm x 6 mm, 3.5 mt long firmly fixed to the ground by means of properly designed foundation with M25 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing The angle iron post shall be duly painted with one coat of epoxy primer and two coats of epoxy finish paints having alternate black and white bands of 25 cm width including GI fixtures and transportation etc.complete.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty				

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
280	Road Furniture	a	MORTH 801	2mm aluminum sheet Class B	MORTH 801	Square Meter	10360	375
281	Road Furniture	b	MORTH 801	4mm aluminum composite material of Class B	MORTH 801	Square Meter	12050	375
282	Road Furniture	c	MORTH 801	2mm aluminum sheet bonded of Class C	MORTH 801	Square Meter	13700	375
283	Road Furniture	d	MORTH 801	4mm aluminum composite material of Class C	MORTH 801	Square Meter	15390	375
	Road Furniture	6.35	MORTH 801	Providing and erecting Overhead signs made out of ___mm aluminum sheet bonded with white retro reflective sheeting of Class__ (Type IV High intensity micro-prismatic grade sheeting-HIP) having pressure sensitive/heat activated adhesive retoreflective specified back ground, border and back side retoreflective symbols, letters, numerals, arrow as per IRC:67-2012, with designed back support frame of mild steel angle with vertical and lateral clearance given in clause 801 and 802, duly painted on back side with two coats of grey stove enamel paint and installed as per clause 802.6 over a designed support system of structural steel work trestles and trusses of sections and type as per structural design requirements and approved plans including painting with one coat of epoxy primer and two coats of epoxy finish paint.The nut bolts of board with angle iron post/supporting structure after fixing at site has to be electrically welded. Class B (Type IV High intensity micro-prismatic grade sheeting-HIP) sheeting shall have 7 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.This item does not include the cost of structural steel work required for support system.				
284	Road Furniture	a	MORTH 801	2mm aluminum sheet of Class B	MORTH 801	Square Meter	5474	163
285	Road Furniture	b	MORTH 801	4mm aluminum composite material of Class B	MORTH 801	Square Meter	7165	163
286	Road Furniture	c	MORTH 801	2mm aluminum sheet of Class C	MORTH 801	Square Meter	8814	163
287	Road Furniture	d	MORTH 801	4mm aluminum composite material Class C	MORTH 801	Square Meter	10504	163

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
288	Road Furniture	6.36	MORTH 801	Providing and fixing board displaying information, such as 'Name of work, Tender cost, Name of Contractor, Work completion and liability period etc', having rectangular shape of 1.20m x 0.90m size made out 18 gauge (1.25mm) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border / messages / symbols etc. with approved colour shade paint complete, on M.S.angle of size 35 x 35 x 3 mm frame with properly cross braced M.S. angles of size 35mmx35mmx3mm duly painted including Two M.S. angle iron posts of size 65 mm x 65 mm x 6 mm, 3.65 m long painted with alternate black and white bands of 25 cm width including all fixtures etc.and fixing the boards in 1:4:8 concrete block of size 60 cm x 60 cm x 75 cm including, excavation, refilling, transportation, and labour etc complete. Spec. Number As directed by Engineer in Charge	MORTH 801	Number	8848	2550
289	Road Furniture	6.37	MORTH 805	Providing and fixing R.C.C. precast cement concrete M-15 pedestal OF SIZE 0.75 X 0.75 X 0.20 m including cost of steel reinforcement for Km. stone as per detailed drawing and specification including transportation of pedestal Block, all lifts etc. complete.	As directed by Engineer-in-charge.	Number	1433	262
290	Road Furniture	6.38		Providing and fixing cautionary / warning sign board of size 60 cm. having shape of equilateral triangle with apex point upwards. prepared on 16 gauge M.S. sheet including painting with one coat of zinc cromate stoving primer and two coats each of white back ground, red border and backside gray stove enamelled, bonded with cut out of Retro reflective sheet Engineering grade, symbol / letters / numerals / border / arrow, coated with non pealable crystal clear protective transparent coat retaining 100% reflection including one number of M.S. Angle iron post of size 50 x 50 x 5 mm of 3.65 m. long inflated at bottom drilled on top in one piece without joint painted with white and black bands of 30 cm. fixing board and post with 2 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size etc.complete. 60 cm. equilateral triangle M.S. sheet with Engineering grade,	IRC-67 2012	Number	4188	866

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
291	Road Furniture	6.39		Providing and fixing Mandatory / Regulatory sign board of circular shape of size 60 cm. dia. prepared on 16 gauge M.S. sheet including painting with zinc chromate stoving primer and two coats each of white back ground, red border and backside gray stove enamelled, bonded with cut out of Retro reflective sheet Engineering grade, symbol / letters / numerals / border, coated with non peelable crystal clear protective transparent coat retaining 100% reflection including one number of M.S. Angle iron post of size 50 x 50 x 5 mm of 3.45 m. long inflated at bottom drilled on top in one piece without joint painted with white and black bands of 30 cm. fixing board and post with 2 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size etc. complete. circular shape of size 60 cm. dia. M.S. sheet with Retro reflective sheet Engineering grade	IRC-67 2012	Number	5150	866
292	Road Furniture	6.40		Providing and fixing sign boards of size 90cm having shape of an equilateral triangle made out of 14 gauge sheet with retro reflective sheeting of Engineering Grade as per M.O.T. specification Number 801-3(1993) white reflective back ground, lettering symbol bordering of black non reflective paint including M. S. angle iron back frame of size 35 mm X 35 mm X 5 mm & M.S. angle one post of 50mm x 50mm x 5mm size 3.45 metre long duly painted with white and black bands including fixing M.S. angle of the boards with galvanised nuts and bolts and washers. The Board shall be as per IRC-67-1977 including conveying fixing in ground with C.C. 1:4:8 block of size 0.60 x 0.60 x 0.75 m, with 7 year guarantee for the sheeting etc. complete. Mild Steel Board with Engineering Grade	IRC-67 2012	Number	5090	1468
293	Road Furniture	6.41		Providing and fixing road junction/information sign boards of size 1.80 x 0.90 Meter Prepared 16 gauge M.S. sheet on frame of M.S. angle of size 35 x 35 x 5 mm with cross bracing of size 35x35x5 mm including painting with one coat of zinc chromate stoving primer and two coats each of green/white back ground and back side gray stove enamelled, bonded with red retro reflective sheet Engineering grade, border / letters / numeral / arrows, coated with non peelable crystal clear protective transparent coat retaining 100% reflection including two angle iron post of size 65 x 65 x 6 mm of 3.65 m. long inflated at bottom, drilled on top and painted in white and black bands of 30 cm. with 4 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long. Sheet and angle iron post in one piece without joints including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in-charge etc. complete. Mild Steel Board with Engineering Grade.	IRC-67 2012	Number	15510	2083

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
294	Road Furniture	6.42		Providing and fixing road junction/ information sign boards of size 1.80 x 0.90 Meter Prepared 16 guage Alluminium sheet on frame of size 35 x 35 x 5 mm with cross bracing of size 35x35x5 mm including bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including two angle iron post of size 65 x 65 x 6 mm of 3.65 m. long inflated at bottom drilled on top and painted in whiteand black bands of 30 cm. with 4 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long sheet and angle iron post in one piece without joints including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in- charge etc. complete. Alluminium sheet Type IV High Intensity Micro-Prismatic Grade Sheeting.	IRC-67 2012	Number	16750	2083
295	Road Furniture	6.43		Providing and fixing informatory sign boards in rectangular shape of size 1.80m x 0.90m made out of 3mm aluminum composite panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame of size 35 mm X 35 mm X 5 mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum composite panel with Type IV High Intensity Micro-Prismatic Grade Sheeting.	IRC-67 2012	Number	18510	1948

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
296	Road Furniture	6.44		Providing and fixing road junction/ information sign boards of size 1.80 x 1.20 Meter Prepared 16 guage M.S.sheet on frame of size 40x40x5 mm with cross bracing of size 35x35 x 5 mm including painting with one coat of zinc cromate stoving primer and two coats each of green/white back ground and back side gray stove enamelled, bonded with red retro reflective sheet Engineering grade, border / letters / numeral /arrows, coated with non pealable crystal clear protective transperent coat retaining 100% reflection includingtwo angle iron post of size 65 x 65 x 6 mm of 3.65 m. long inflated at bottom drilled on top and painted in whiteand black bands of 30 cm. with 4 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long sheet and angle iron post in one piece without joints including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in- charge etc. complete. Mild Steel Board with Engineering Grade.	IRC-67 2012	Number	17420	2274
297	Road Furniture	6.45		Providing and fixing road junction/ information sign boards of size 1.80 x 1.20 Meter Prepared 16 guage Alluminium sheet on frame of with angle iron frame of size40x40x5mm with cross bracing of size 35x35x5 mm including Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour back ground including two angle iron post of size 65 x 65 x 6 mm of 3.65 m. long inflated at bottom drilled on top and painted in whiteand black bands of 30 cm. with 4 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long sheet and angle iron post in one piece without joints including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in- charge etc. complete. Alluminium sheet Type IV High Intensity Micro-Prismatic Grade Sheeting.	IRC-67 2012	Number	18903	2150

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
298	Road Furniture	6.46		Providing and fixing informatory sign boards in square or rectangular shape of size 1.80m x1.20m made out of 3mm Aluminum composite panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame of size 35 mm X 35 mm X 5 mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum composite panel with Type IV High Intensity Micro-Prismatic Grade Sheeting.	IRC-67 2012	Number	22311	2262
299	Road Furniture	6.47		Providing and fixing Road junction / Information sign board of size 0.90 m x 0.60 m. prepared on 16 gauge M.S. sheet with angle iron frame of size 35x35x5 mm including painting with one coat of zinc cromate stoving primer and two coats each of green/ white background and back side gray stove enamelled, bonded with red retro reflective sheet Engineering grade, border / letters / numeral / arrows, coated with non peelable crystal clear protective coat retaining 100% reflection including two angle iron post of size 50x50x5 mm of 3.65 m. long inflated at bottom drilled on top and painted in white and black bands of 30 cm. with 4 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long sheet and angle iron post in one piece without joints including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in-charge etc. complete. Mild Steel Board with Engineering Grade.	IRC-67 2012	Number	7246	1341
300	Road Furniture	6.48		Providing and fixing informatory sign boards of size 0.90 x 0.60 m made out of 14 gauge Aluminum sheet bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including on frame of with angle iron frame of size 35 x 35 x 5 mm and two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in 1:4:8 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Alluminium sheet Type IV High Intensity Micro-Prismatic Grade Sheeting	IRC-67 2012	Number	8403	1157

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
301	Road Furniture	6.49		Providing and fixing informatory sign boards shape of size 0.90 x 0.60 m made out of 3mm Aluminum composite panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame of size 35 mm X 35 mm X 5 mm & M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum composite panel with Type IV High Intensity Micro-Prismatic Grade Sheeting. Spec.Number As per IRC-67, 2015	IRC-67 2012	Number	11468	1075
302	Road Furniture	6.50		Providing and fixing sign boards of size size 60 x 80 cm made out of 14 gauge M.S.Sheet with retro reflective sheeting of Engineering Grade as per M.O.T. specification Number 801-3(1993) white reflective back ground, lettering symbol bordering of black non reflective paint including 3.65 metre long M.S.angle one post of 65 x 65 x 6 mm size duly painted with white and black bands including fixing the boards of M.S. angle with galvanised nuts and bolts and washer. The Board shall be as per IRC-67-1977 including conveying fixing in ground with C.C. 1:4:8 block of size 0.60 x 0.60 x 0.75 m, with 7 year guarantee for the sheeting etc. complete. Mild Steel Board with Engineering Grade.	IRC-67 2012	Number	6623	1035
303	Road Furniture	6.51		Providing and fixing informatory sign boards of size 60 cm x 80 cm made out of 14 guage Aluminum sheet bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in 1:4:8 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Alluminium sheet Type IV High Intensity Micro-Prismatic Grade Sheeting	IRC-67 2012	Number	7130	968

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
304	Road Furniture	6.52		Providing and fixing informatory sign boards of size 60 cm x 80 cm made out of 3mm Aluminum composite panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheet (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame of size 35 mm X 35 mm X 5 mm & M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum composite panel with Type IV High Intensity Micro-Prismatic Grade Sheet.	IRC-67 2012	Number	7897	846
305	Road Furniture	6.53		Providing and fixing N.H./ S.H. Route Marker size 60 cm x 45 cm with one Number direction plate of size 30 cm x 25 cm prepared on 16 gauge M.S. sheet including painting with one coat of zinc chromate stoving primer and two coats each of white and green back ground and back side gray stove enamelled, bonded with cut out of red Retro reflective sheet Engineering grade, border / letters / numerals and arrow, coated with non peelable crystal clear protective transparent coat retaining 100% reflection including one number of M.S. Angle iron post of size 50 x 50 x 5 mm of 3.65 m. long inflated at bottom drilled on top in one piece without joint painted with white and black bands of 30 cm. fixing board and post with 4 Nos. of high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in-charge etc. complete. Mild Steel Route Marker with Engineering Grade	IRC-67 2012	Number	3753	791

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
306	Road Furniture	6.54		Providing and fixing N.H./ S.H. Route Marker size 60 cm x 45 cm with one Number direction plate of size 30 cm x 25 cm prepared on 16 guage Alluminium sheet including Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround, including one number of M.S. Angle iron post of size 50 x 50 x 5 mm of 3.65 m. long inflated at bottom drilled on top in one piece without joint painted with white and black bands of 30 cm. fixing board and post with 4 Nos. of high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long including all taxes, conveying, fixing in ground with cement concrete 1:4:8 block of 60 cm x 60 cm x 75 cm size as directed by Engineer-in-charge etc. complete. Alluminium sheet Type IV High Intensity Micro-Prismatic Grade Sheeting	IRC-67 2012	Number	4122	791
307	Road Furniture	6.55		Providing and fixing Road junction / Information sign board of size 1.20 m x 0.90 m. prepared on 16 gauge M.S. sheet with angle iron frame of size 35 x 35 x 5 mm with cross bracing of size 35 x 35 x 5 mm including painting with one coat of zinc cromate stoving primer and two coats each of green/white back ground and back side gray stove enamelled, bonded with red retro reflective sheet Engineering grade, border / letters / numeral /arrows, coated with non pealable crystal clear protective transperent coat retaining 100% reflection includingtwo angle iron post of size 65 x 65x 6 mm of 3.65 m. long inflated at bottom drilled on top and painted in whiteand black bands of 30 cm. with 4 Nos. high strength G.I. bolts and nuts of size 10 mm dia. and 20 mm long sheet and angle iron post in one piece without joints including all taxes, conveying, fixing in ground with M-20 cement concrete of 60 cm x 60 cm x 75 cm size as directed by Engineer-in- charge etc. complete. Mild Steel sheet with Engineering grade.	IRC-67 2012	Number	12811	1724
308	Road Furniture	6.56		Providing and fixing informatory sign boards in rectangular shape of size 1.20m x 0.90m made out of 16 guage Aluminum panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame of size 35 mm X 35 mm X 3 mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum Panel Type IV High Intensity.	IRC-67 2012	Number	12296	1724

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
309	Road Furniture	6.57		Providing and fixing informatory sign boards in rectangular shape of size 1.20m x 0.90m made out of 3mm Aluminum composite panel bonded with IRC Specified colour of retro reflective sheeting of Type IV High Intensity Micro-Prismatic Grade Sheeting (HIP) having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame of size 35 mm X 35 mm X 3 mm & two M.S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.65 m long, duly painted with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M-20 concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Aluminum composite panel Type IV High Intensity.	IRC-67 2012	Number	14493	1724
310	Road Furniture	6.58		Providing and fixing informatory sign boards in square or rectangular shape of any size for overhead gantries or alike made out of 3mm aluminum composite panel bonded with IRC Specified colour of retro reflective sheeting of Type XI Diamond Grade Sheeting (DG3) With ECF(Electronic Cutable Film) Lettring having pressure sensitive / heat activated adhesive, IRC Specified colour retro reflective cutout border & messages having pressure sensitive adhesive having border & messages in IRC Specified colour backKilogramround including M. S. angle iron frame and bracing of size 35 mm X 35 mm X 5 mm and duly painted with flat oil paint including G.I. fixtures etc. and fixing the boards. (The work to be executed with prior approval of Superintending Engineer.)	IRC-67 2012	Square Metre	11403	1109

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
311	Road Miscellaneous items	7.01	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	MORTH 408	Running Metre	481	156
312	Road Miscellaneous items	7.02	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Semi Barrier type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	MORTH 408	Running Metre	446	150
313	Road Miscellaneous items	7.03	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Mountable type Kerb without gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	MORTH 408	Running Metre	422	145
314	Road Miscellaneous items	7.04	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	MORTH 408	Running Metre	832	194
315	Road Miscellaneous items	7.05	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Semi Barrier type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	MORTH 408	Running Metre	734	172
316	Road Miscellaneous items	7.06	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Mountable type Kerb with gutter (as per IRC 86 1983) embedded 125mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	MORTH 408	Running Metre	662	159

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
317	Road Miscellaneous items	7.07	As directed by Engineer Incharge	Providing and fixing in position Guard Railing as per Drg. Number 15 Type C dt. 20-4-79, with 3 rows of 50mm dia. G.I. pipe 30cm a part and fixed in M.S. channels of section 125 x 65 x 6 mm spaced 2.5 C/c 1:2:4 c.c. bedding of size 45 x 30cm. as per detailed drawing, with 3 coats of approved yellow and black paint including necessary excavation in any strata.	RD	Running Metre	2636	155
318	Road Miscellaneous items	7.08	As directed by Engineer Incharge	Providing and fixing in position Guard Railing as per Drg. Number 15 Type C dt. 20-4-79, with 3 rows of 40mm dia. G.I. pipe 30cm a part and fixed in M.S. channels of section 100 x 50 x 6 mm spaced 2.5 C/c 1:2:4 c.c. bedding of size 45 x 30 x 30cm. as per detailed drawing, with 3 coats of approved of yellow and black paint including necessary excavation in any strata.	RD	Running Metre	1875	128
319	Road Miscellaneous items	7.09	As directed by Engineer Incharge	Providing and fixing Guard Railing of 1000mm height as per Type D Drg. Number 15 dt. 20-4-79, and fixed in 40 x 40 x 6mm iron, angle embedded in 1:2:4 cement concrete bedding patti as per detailed drawing, with 3 coats of approved of yellow and black paint.	RD	Running Metre	1954	165
320	Road Miscellaneous items	7.10	As directed by Engineer Incharge	Providing and fixing Guard Railing of 1000 mm height in 25mm M.S. square bars 100 mm C/c. as per Type drawing Number 6 dt. 20-8- 85 and fixed in 50mm x 50mm x 6mm iron angle embedded in 1:2:4 C.C. bedding 55 x 45 cm and 50 x 6 iron patti as per detailed drawing with 3 coats of approved yellow and black paint.	RD	Running Metre	2433	226
321	Road Miscellaneous items	7.11	MORTH	Design of overlay for existing B.T. surface with carrying out testing by Benkelman Beam method as per guide lines in IRC 81:1997 including design and testing at site. The charges for transportation of Benkelman Beam, loaded truck, labour for testing and traffic control are not included.	IRC-81	Kilometre	6378	447
322	Road Miscellaneous items	7.12	MORTH	Carrying out roughness index / road unevenness test with car mounted / jeep towed ARUR machine (Automatic road unevenness Recorder) Calibrated from C.R.R.I. New Delhi (Central Road Research Institute) or any other equivalent authority including taking observations, feeding data and giving computerized test result including hire charges of all machinery and labour completed. i) Road surface single lane (B.TW,B.M.) 3.75 m Width.	As Directed by Engineer In Charge	Kilometre	578	NA
323	Road Miscellaneous items	7.13	MORTH	Carrying out roughness index / road unevenness test with car mounted / jeep towed ARUR machine (Automatic road unevenness Recorder) Calibrated from C.R.R.I. New Delhi (Central Road Research Institute) or any other equivalent authority including taking observations, feeding data and giving computerized test result including hire charges of all machinery and labour completed. i) Road surface single lane (B.TW,B.M.) 5.5 m to 7.00 m. Width.	As Directed by Engineer In Charge	Kilometre	1148	NA

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
324	Road Miscellaneous items	7.14	MORTH	Carrying out roughness index / road unevenness test with car mounted / jeep towed ARUR machine (Automatic road unevenness Recorder) Calibrated from C.R.R.I. New Delhi (Central Road Research Institute) or any other equivalent authority including taking observations, feeding data and giving computerized test result including hire charges of all machinery and labour completed. i) Road surface single lane (B.TW,B.M.) Each additional lane Width.	As Directed by Engineer In Charge	Kilometre	574	43
325	Road Miscellaneous items	7.15	MORTH	Dead Journey charges for Transportation of machine/ vehical for Carrying out roughness index / road unevenness test with car mounted / jeep towed ARUR machine (Automatic road unevenness Recorder) Calibrated from C.R.R.I. New Delhi (Central Road Research Institute) or any other equivalent authority including taking observations, feeding data and giving computerized test result including hire charges of all machinery and labour completed. Spec. Number : As directed by Engineer in charge.	As Directed by Engineer In Charge	Kilometre	14	1
326	Road Miscellaneous items	7.16	MORTH 702	Providing and laying a woven Polypropylene Geotextile of Type-I manufactured from black UV stabilised Polypropylene Tape yarn on the prepared subgrade as the separator cum reinforcement with necessary overlap as per drawing.(For use this item SE/CE permission is obligatory.)	MORTH 702	Square Metre	159	73
327	Road Miscellaneous items	7.17	MORTH 702	Providing and laying a woven Polypropylene Geotextile of Type-II manufactured from black UV stabilised Polypropylene Tape yarn on the prepared subgrade as the separator cum reinforcement with necessary overlap as per drawing.(For use this item SE/CE permission is obligatory.)	MORTH 702	Square Metre	159	73
328	Road Miscellaneous items	7.18	MORTH 702	Providing and laying a woven Polypropylene Geotextile of Type-III manufactured from black UV stabilised Polypropylene Tape yarn on the prepared subgrade as the separator cum reinforcement with necessary overlap as per drawing. (For use this item SE/CE permission is obligatory.)	MORTH 702	Square Metre	159	73
329	Road Miscellaneous items	7.19	MORTH 702	Providing and laying a fibre glass geogrid of Tensile strength 50 kN/m manufactured from high quality glass fibre strands and coated with a polymer modified bitumen as reinforcement to Asphalt overlay flexible pavements and Asphalt over distressed rigid P.C.C.	MORTH 702	Square Metre	152	73
330	Road Miscellaneous items	7.20	MORTH 702	Providing and laying a fibre glass geogrid of Tensile strength 100 kN/m manufactured from high quality glass fibre strands and coated with a polymer modified bitumen as reinforcement to Asphalt overlay flexible pavements and Asphalt over distressed rigid P.C.C.	MORTH 702	Square Metre	227	94

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
331	Road Miscellaneous items	7.21	As directed by Engineer Incharge	Providing and Constructing gabion structure 1 Meter high or required section made up of soft mechanically woven hexagonal shaped G.I. wire confirming to IS 16014:2012 having zinc plus PVC coating of overall diameter of 3.7 mm and tying lacing wire of 3.2 mm with edge wire confirming to overall diameter 4.4 mm edges being mechanically selvedge including placing in position, fitting neatly with trap stone rubble (15 to 23 cm) all loose ends to be securely tied (Excluding transportation) etc. complete. (In Dry condition and for under water installation extra cost to be considered)	MORTH 2503	Cubic Metre	3404	561
332	Road Miscellaneous items	7.22	As directed by Engineer Incharge	Providing and Constructing gabion structure 0.50 Meter high or required section made up of soft mechanically woven hexagonal shaped G.I. wire confirming to IS 16014:2012 having zinc plus PVC coating of overall diameter of 3.7 mm and tying lacing wire of 3.2 mm with edge wire confirming to overall diameter 4.4 mm edges being mechanically selvedge including placing in position, fitting neatly with trap stone rubble (15 to 23 cm) all loose ends to be securely tied (Excluding transportation) etc. complete.(In Dry condition and for under water installation extra cost to be considered)	MORTH 2503	Cubic Metre	3386	662
333	Road Miscellaneous items	7.23	MORTH 702	Providing and laying Needle Punched and mechanically bonded non woven Geotextile of Type III indigenously manufactured from high quality Propylene staple fibers (continuous filament will not be accepted) on the prepared subgrade for Seperation.(For use this item SE/CE permission is obligatory.)	MORTH 702	Square Metre	155	70
334	Road Miscellaneous items	7.24	MORTH 703	Providing and laying Needle Punched and mechanically bonded non woven Geotextile of Type II indigenously manufactured from high quality Propylene staple fibers (continuous filament will not be accepted) on the prepared subgrade for Seperation.(For use this item SE/CE permission is obligatory.)	MORTH 702	Square Metre	155	70
335	Road Miscellaneous items	7.25	MORTH 202	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 metres and stacking the serviceable and unserviceable material separately	MORTH 202	Number	325	305
336	Road Miscellaneous items	7.29	MORTH 409	Footpaths and Separators -- Construction of footpath/separator by providing a 150 mm compacted granular sub base as per clause 401 and 25 mm thick cement concrete grade M15, over laid with pre-cast concrete tiles in cement mortar 1:3 including provision of all drainage arrangements but excluding kerb channel.	MORTH 409	Square Metre	836	81

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
337	Road Miscellaneous items	7.30	MORTH 810	Metal Beam Crash Barrier -- Type - A, W : Metal Beam Crash Barrier (Providing and erecting a W metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810)""	MORTH 810	Running Metre	3268	240
338	Road Miscellaneous items	7.31	MORTH 810	Metal Beam Crash Barrier -- Type - B, THRIE : Metal Beam Crash Barrier (Providing and erecting a Thrie metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 85 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 2 m high with 1.15 m below ground level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a space of channel section 150 x 75 x 5 mm, 546 mm long complete as per clause 810)""	MORTH 810	Running Metre	4783	240
339	Road Miscellaneous items	7.32	MORTH 811	Flexible Crash Barrier, Wire Rope Safety Barrier (Providing and erecting a wire rope safety barrier with vertical posts of medium weight RS Joist (ISMB series) 100 mm x 75 mm (11.50 Kilogram/m), 1.50 m long 0.85 m above ground and 0.65 m below ground level, split at the bottom for better grip, embedded in M 15 grade cement concrete 450 x 450 x 450 mm, 1.50 m center to center and with 4 horizontal steel wire rope 40 mm dia and anchored at terminal posts 15 m apart. Terminal post to be embedded in M 15 grade cement concrete foundation 2400 x 450 x 900 mm (depth), strengthened by a strut of RS joist 100 x 75 mm, 2 m long at 450 inclination and a tie 100 x 8 mm, 1.50 m long at the bottom, all embedded in foundation concrete as per approved design and drawing, rate excluding excavation and cement concrete.)	MORTH 811	Running Metre	2277	144
340	Road Miscellaneous items	7.33	MORTH 811	Anti - Glare Screen with 25 mm steel pipe framework fixed with circular and rectangular vans (Providing and erecting an anti - glare screen with 25 mm dia vertical pipes fabricated and framed in the form of panels of one metre length and 1.75 mtr height fixed with circular vane 250 mm dia at top and rectangular vane 600 x 300 mm at the middle, made out of steel sheet of 3 mm thickness, end vertical pipes of the panel made larger for embedding in foundation concrete, applying 2 coats of paint on all exposed surfaces, all as per approved design and drawings.)	MORTH 811	Running Metre	1985	71

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
341	Road Miscellaneous items	7.34	MORTH 811	Anti - Glare Screen with Rectangular Vane of MS sheet (Providing and erecting anti - glare screen with rectangular vanes of size 750 x 500 mm made from MS sheet, 3 mm thick and fixed on MS angle 50 x 50 x 6 mm at an angle of 450 to the direction of flow of traffic, 1.5 m center to center, top edge of the screen 1.75 m above ground level, vertical post firmly embedded in cement concrete foundation 0.60 m below ground level, applying 2 coats of paint on exposed faces, all complete as per approved design and drawings)	MORTH 811	Running Metre	1049	95
342	Road Miscellaneous items	7.35	MORTH 809	Providing Reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures and medians, constructed with R.C.C. M 20 Grade concrete with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia, 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST circular Number RW/NH - 33022/1/94-DO III dated 24 June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer, all as specified etc. complete. Spec: MORT and H 2013 Cl 811 Page No 360	MORTH 809	Running Metre	3168	108
343	Road Miscellaneous items	7.36	MORTH 809	Providing Reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures and medians, constructed with R.C.C. M 25 Grade concrete with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia, 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST circular Number RW/NH - 33022/1/94-DO III dated 24 June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer, all as specified etc. complete. Spec: MORT and H 2013 Cl 811 Page No 360	MORTH 809	Running Metre	3310	108
344	Road Miscellaneous items	7.37	MORTH 809	Providing Reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures and medians, constructed with R.C.C. M 30 Grade concrete with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia, 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST circular Number RW/NH - 33022/1/94-DO III dated 24 June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer, all as specified etc. complete. Spec: MORT and H 2013 Cl 811 Page No 360	MORTH 809	Running Metre	3329	108

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
345	Road Maintenance	8.01	RD	Labour for filling pot holes with premix asphalt chips, cleaning the road surface with wire brushes and gunny bags, applying tack coat, spreading mixture hand ramming or light compaction with power roller conveying material to the site of work (excluding cost and of material fuel and heating asphalt) etc complete.	As Directed by Engineer In Charge	Square Metre	66	65
346	Road Maintenance	8.02	RD	Labour for metal patch repairs including preparing surface, adding required quantity of metal, murum, watering, ramming etc complete. Spec.Number: As directed by Engineer- in-charge. (excluding cost and of material)	As Directed by Engineer In Charge	Square Metre	82	56
347	Road Maintenance	8.03	MORTH 3002	Restoration of rain cuts with soil, murum gravel or a mixture of these, clearing the loose soil, benching for 300mm width laying fresh material in layers not exceeding 250 mm and compaction with plate compactor or power rammer to restore the original alignment, level and slopes as per drawings and MORTH specification clause 3002	MORTH 3002	Cubic Metre	178	117
348	Road Maintenance	8.04	MORTH 3003	Making up loss of material/irregularities on shoulders to the design level by adding fresh approved selected soil and compacting it with appropriate equipment at OMC as per MORTH specification clause 3003	MORTH 3003	Square Metre	45	15
349	Road Maintenance	8.05	MORTH 3003	Stripping excess soil from the shoulder surface to achieve the approved level and compacting with plate compactor at OMC as per drawings as per MORTH specification clause 3003	MORTH 3003	Square Metre	19	14
350	Road Maintenance	8.06	MORTH 3004.2	Repair to pot holes by removal of failed material, trimming the sides to vertical and levelling the bottom, cleaning the same with compressed air or any appropriate method filled with 75mm B.M, applying bitumen tack coat at the bottom and vertical sides as per as per MORTH specification clause 3004.1 and 3004.2	MORTH 3004.2	Cubic Metre	6572	124
351	Road Maintenance	8.07	RD	Patch repair on already filled pot holes with 20 mm premix carpet and seal coat as per MORTH specification clause 3004.1 and 3004.2	As Directed by Engineer In Charge	Square Metre	221	7
352	Road Maintenance	8.08	MORTH 3004.2	Repair to pot holes and removal of loose material, trimming of sides, cleaning of surface by providing tack coat, 20 mm thick pre-mix carpet and seal coat as per MORTH specification clause 3004.1 and 3004.2	MORTH 3004.2	Square Metre	323	63
353	Road Maintenance	8.09	RD	Maintenance of gravel road including making up the loss of profile, rectifying corrugated surface, filling up of depressions, pot holes and erosion gullies by adding fresh material and compacting it with appropriate equipment or to strip excess of material from the road surface as per drawings etc complete	As Directed by Engineer In Charge	Square Metre	91	16

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
354	Road Maintenance	8.10	RD	Providing pick and roll surface by picking the old WBM surface to the required standard, adding 30% of 40mm size metal and required quantity of murum including laying sectioning, watering, compacting with static roller with thin layer of murum blindage on carrageway, watering and compacting by static roller, including cost of all materials, loading, unloading, stacking and labour etc. complete. Spec.Number : As directed by Engineer- in-charge.	As Directed by Engineer In Charge	Square Metre	104	13
355	Road Maintenance	8.11	RD	Maintenance of WBM road including filling up of pot holes, ruts and rectifying corrugated surface, damaged edges and ravelling etc. complete	As Directed by Engineer In Charge	Square Metre	216	54
356	Road Maintenance	8.12	RD	The maintenance of drains include erosion, repair, clearing, cleaning, reshaping, regrading, deepening of side drains as well as catch water drains etc. complete	As Directed by Engineer In Charge	Running Metre	16	16
357	Road Maintenance	8.13	RD	Maintenance of Hume pipe Culvert by way of Clearing, Cleaning, Erosion repair, repairs to cracks, parapet wall and protection work as per drawing etc. complete	As Directed by Engineer In Charge	Number	2138	1061
358	Road Maintenance	8.14	RD	Maintenance of road signs by way of cleaning and repainting of mandatory / regulatory / cautionary / informatory and place identifications sign board as per drawings etc. complete	As Directed by Engineer In Charge	Kilometre	4412	2860
359	Road Maintenance	8.15	RD	Maintenance of Kilometer stones, and 200 metre by way of refitting of tilted stones repairing with cement mortar, cleaning, repairing and lettering on 200 metre km stone and 5th km stone etc. complete	As Directed by Engineer In Charge	Kilometre	993	689
360	Road Maintenance	8.16	RD	Cutting of branches of trees and shrubs from the road way or with in R.O.W including disposal of wood and leaves to suitable location etc. complete	As Directed by Engineer In Charge	Number	229	169
361	Road Maintenance	8.17	RD	Trimming of grass, shurbs and weeds from the shoulders/berms and disposing off the same to suitable locations etc. complete	As Directed by Engineer In Charge	Square Metre	7	7
362	Road Maintenance	8.18	RD	Maintenance of guard stones/ boundry stones/ indicator stones by way of refitting of tilted stones repairing with cement mortar, cleaning, repairing and white washing etc. complete	As Directed by Engineer In Charge	Kilometre	988	432
363	Road Maintenance	8.19	RD	Repair of steel railing to bring it to original shape cleaning and repainting as per drawing etc. complete	As Directed by Engineer In Charge	Running Metre	359	216
364	Road Maintenance	8.20	RD	Repair of RCC railing to bring it to the original shape, cleaning and repainting as per drawings etc. complete	As Directed by Engineer In Charge	Running Metre	736	311
365	Road Maintenance	8.21	RD	Removal of steel railing and refixing of railing to submersible bridges including cleaning and repainting etc complete	As Directed by Engineer In Charge	Running Metre	461	358
366	Road Maintenance	8.22	RD	White washing two coats on parapet walls and white washing and geru lime painting to tree trunks including preparation of surface by cleaning scraping etc. complete	As Directed by Engineer In Charge	Square Metre	22	14

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
367	Road Maintenance	8.23	RD	Dressing of side shoulder / Scrapping the road side shoulder by Mechanical means (By JCB /DOUZER) including excavation of raised side shoulders upto 15cm depth including remooving /cutting bushes,grass and dressing shoulder to desired camber and disposing of excavated stuff up to road boundary etc complete. as directed by Engineer In Charge.	As Directed by Engineer In Charge	Square Metre	5	0
368	Road Maintenance	8.24	MORTH	Providing and Laying Pressure Sensitive Technology (PST) based Insstapatch ready mix compound for repair potholes, manufactured from aggregates of 4-12 mm, treated with special grade bitumen, Pressure Sensitive Polymer(PSP) and Cross Linking Chemical (CLC) agents etc, technically evaluated for repairs on bitumenous/concrete surfaces, confirming to CRR1 and IRC accredited norms for pressure sensitive polymer products for repairs of Potholes on road/ Pavements, havinf upto 25mm thick insstapatch layer on base of compacted aggregates (Crusher Brocken) of 50mm thickness including labours, material, tools and tampering etc complete.	As Directed by Engineer In Charge	Square Metre	925	43
369	Road Maintenance	8.25	MORTH 514	Providing, laying and rolling Micro seal surfacing (10 mm thick) for preventive maintainance including supplying all materials , preparing the existing road surface , heating bitumen , aggregates , lime in hot mix plant , laying the mix seal surfacing by paver finisher and compaction by power roller etc complete.(Using 60/70 bulk bitumen for mixing and tack coat over black topped surface by using 0.14 Cum per 10 Square Metre. of crusher aggregate passing 100 % through 6.30 mm sieve and retained100 % on 0.075 mm size sieve 0.2Kilogram/ Square Metre lime and 11.00Kilogram/ 10 Square Metre bulk bitumen for fixing and 0.50Kilogram/ Square Metre for tack coat) Spec: As directed by Engineer In Charge and IRC SP 78 - 2008	As Directed by Engineer In Charge	Square Metre	87	16
370	Road Maintenance	8.26	MORTH 514	Providing, laying and rolling Micro seal surfacing (10 mm thick) for preventive maintainance including supplying all materials , preparing the existing road surface , heating bitumen , aggregates , lime in hot mix plant , laying the mix seal surfacing by paver finisher and compaction by power roller etc complete.(Using 60/70 bulk bitumen for mixing and tack coat over black topped surface by using 0.14 Cum per 10 Square Metre. of crusher aggregate passing 100 % through 9.50 mm sieve and retained100 % on 0.075 mm size sieve 0.2Kilogram/ Square Metre lime and 9.50Kilogram/ 10 Square Metre bulk bitumen for fixing and 0.50Kilogram/ Square Metre for tack coat) Spec: As directed by Engineer In Charge and IRC SP 78 -2008	As Directed by Engineer In Charge	Square Metre	83	3
371	Road Maintenance	8.27	MORTH 408	Providing and laying shoulder drain of trap rubble of 0.45 x 0.45 meter section at 45 degree angle to the road edge including hand packing, filling voids with sand/shingle of approved quality and ramming etc. complete as desired.	As Directed by Engineer In Charge	Running Metre	270	44

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
372	Road Maintenance	8.28	As Directed by Engineer In Charge	Providing and laying Pressure Sensitive Technology (PST) based ready mix compound for repairing potholes, manufactured from aggregates of 4-12mm, treated compound having mix of bituminous antistriping compound, stabilizer, Pressure Sensitive Polymer and water repellent compound like oil soluble polyacid etc. having good consistency for laying, technically evaluated for repairs on bituminous/concrete surface confirming to CRRRI and IRC accredited norms for pressure sensitive polymer products for repairs fo potholes on road/ pavement having upto 25mm thick ready thickness including labours, material, tools and tampering etc. complete. (Undertaking shall be taken from the supplier before starting the work) (For heavy traffic & heavy rain with 1 year guarantee)	RD	Square Metre	1939	
373	Road Maintenance	8.29	As Directed by Engineer In Charge	Supply of self watering system Multi Stage Tree guard / Protctor 110 mm dia & total height of 1800 mm made up with HDPE. In tubular section, first stage will be 600mm long & second and forth stage 65% perforated casting in HDPE tubular section of 300mm long each tubular section & third and fifth stage of plain 300mm long each tubular section in 110mm dia. all sections fix with stagewise with leakproof fixing arrangement 2 no tubular rubber section of 75mm dia, 1.5mm thick & length 350 mm (fix on both 65% perforated tubular section at top for increase the water holding capacity as per plant height). The specially designed rubber water holding device of size 90mm dia outside & 12mm dia inside of 1.5mm thick as per design fix on 40mm dia. 100mm long pvc pipe seperately.(for inserting the plants). 2 nos 40mm dia. treated bamboo of 2.00 mtr. height (buried 150 mm below the bottom of excavated pit & stand with tubular section) 2 nos rubber/pvc ties (fix at bottom & top of plain tubular section with bamboo) 2 nos 5mm dia. fromate (fixing at bottom o tubular section for deep root irrigation system) 2 nos 600mm long HDPE lateral pipe of 5mm dia. with deep roor irrigation system (insert in the gromate & pit, away form 200 mm from plant roots). 1200 mm long barbed wire of 14 guage (The treeguard is rapping with 1200 mm long barbed wire over third plain tubular section for protection against cattles & other external factors) as per technical specification & manual. (Cost of Plant & fixing charges will be extra	RD	Number	1136	71
374	Road Maintenance	8.30	As Directed by Engineer In Charge	Supply of self watering system tree guard in 110 mm dia, 1.80 mt height made up of cotton canvas cloth of polymer pipe of 15 litres water storage capacity stand with 2 nos. 40 mm dia treated bamboo of 2 mt ht. tie with tag at two nos and specially designed dexpandable rubber seal 110 mm dia outer & 25 mm dia. inner dia installed on bottom of pipe, and 0.60 m long HDPE lateral pipe 2 nos 5mm dia to carry the water near root zone connected with gromate fix in treeguard and rapping 1.20m long barbed wire to middle of treeguard for protection agianst cattles and other external factors as per specification. (cost of plant & fixing charges will be extra as per approved rates). (Note :- Plant height should be required above 2.50 m & Dia of stem 25 mm at bottom)	RD	Number	858	71

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
375	Road Maintenance	8.31	As Directed by Engineer In Charge	Fixing and Transporting of self watering system tree guard-insertion of sapling in self watering tree guard and capping the bottom with expandable rubber seal. Supporting the bamboo with the help of cable tie. Bamboo to be buried 0.15 mt ht. below of excavated pit. Strengthening the bamboo in pit with adequate measures. Circulating the barbed wire around tree guard at middle ht. from bottom and fixing it. Thr rates excluding the cost of barbed wire, bamboo, expandable seal, tree guard and all other required material. Fixing to be carried out as per manual instruction.	RD	Number	92	92
376	Road Maintenance	8.32	Rd.43.3.1	Providing 50 mm thick Full grout bituminous treatment including supplying all materials , preparing the exisisting road surface,applying tack coat @ 0.735Kilogram/ Square Metre and laying the required thickness of metal layer, heating and spraying bitumen of specified Grade at the rate of 5.00Kilogram/ Square Metre , spreading chips and laying seal coat of specified Grade of bitumen of 1.70 Kilogram/Square Metre and compacting , making the surface good etc. complete (For only Patch Repair works / For Road work) (VG-30 bulk bitumen rates are considered to arrive at rates)	As Directed by Engineer In Charge	Square meter	481	110
377	Road Maintenance	8.33	Rd.45.3.1	Providing 50 mm thick semi grout bituminous treatment including supplying all materials , preparing the exisisting road surface,applying tack coat @ 0.735Kilogram/ Square Metre and laying the required thickness of metal layer, heating and spraying bitumen of specified Grade at the rate of 2.75Kilogram/ Square Metre , spreading chips and laying seal coat of specified Grade of bitumen of 1.25 Kilogram/Square Metre and compacting , making the surface good etc. complete (For only Patch Repair works / For Road work) (VG-30 bulk bitumen rates are considered to arrive at rates)	As Directed by Engineer In Charge	Square meter	394	110
378	Road Maintenance	8.34	MORTH 505	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone layers metal 30% crusher broken metal + 70% Hand broken metal (By breaking Rubble obtained by blasting) , heating and spraying the bitumen of VG-30 grade @ 2Kilogram/ Square Metre , spreading 12mm.size chips compacting with three wheel static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc.complete, including applying tack coat of VG 10 grade bitumen at the rate of 0.30KilogramSquare Metre. on existing bitumen surface. (For Repair works only)	As Directed by Engineer In Charge	Square meter	220	5

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
379	Road Maintenance	8.35	MORTH 505	Providing and constructing 50 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40mm. stone layers metal 30% crusher broken metal + 70% Hand broken metal (By breaking Rubble obtained by blasting) , heating and spraying the bitumen of VG-30 @ 1.75Kilogram/ Square Metre, spreading 12mm.size chips compacting with Static roller having weight 8 to 10 MT. to achive the desired degree of compaction as per Technical Specification Clause 506 etc.complete, including applying tack coat at the rate of 0.30KilogramSquare Metre.(for repair works only)	As Directed by Engineer In Charge	Square meter	175	4

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2020-21 CD WORKS & BRIDGE WORKS								
380	Cross Drainage Works	11.01	CD 1	Providing rubble filling of trap/ granite/ quartzite gneiss stones for foundations including filling voids with sand/grit and compaction etc complete.	CD.1 Page.Number 159	Cubic Meter	1359	403
381	Cross Drainage Works	11.02	CD 3A	Providing and laying in situ / ready mix cement concrete of M-10 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etc. complete. (with reversible drum type mixer with SCADA with fine aggregates of required specifications (VSI sand finely washed etc)	CD.-3 Page.Number 160	Cubic Meter	5470	1400
382	Cross Drainage Works	11.04	CD 3B	Providing and laying in situ cement concrete of 1:4:8 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etc. complete. (with reversible drum type mixer with SCADA with fine aggregates of required specifications (VSI sand finely washed etc)	CD.3 Page.Number 160	Cubic Meter	5134	1400
383	Cross Drainage Works	11.06	CD 4	Providing rubble stone paving 15cm thick in 1:3 cement mortar over a bedding of 15cm thick cement concrete of 1:4:8 proportion with trap /granite /quartzite /gneiss metal including striking joints and watering etc. complete.	CD.4 Page.Number 160	Square Meter	2100	897
384	Cross Drainage Works	11.07	CD 6	Providing uncoursed rubble trap /quartzite /gneiss stone masonry in cement mortar 1:5 for piers, abutments, wings, returns, head-walls, parapet etc. including bailing out of water, striking joints of the non exposed faces, pointing the exposed faces with cement mortar 1:3, scaffolding, watering to masonry and etc. complete.	CD.6 Page.Number 162	Cubic Meter	4677	1980
385	Cross Drainage Works	11.08	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 450mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page.Number 162	Running Metre	1838	393
386	Cross Drainage Works	11.09	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 600mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page.Number 162	Running Metre	2548	393
387	Cross Drainage Works	11.10	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 800mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page.Number 162	Running Metre	3874	393
388	Cross Drainage Works	11.11	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 900mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page.Number 162	Running Metre	4552	393
389	Cross Drainage Works	11.12	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 1000mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page.Number 162	Running Metre	5110	393
390	Cross Drainage Works	11.13	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 1200mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page.Number 162	Running Metre	7184	393

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
391	Cross Drainage Works	11.14	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-3 class of 600mm diameter in proper line, level and slope etc. complete.	CD.7 Page.Number 162	Running Metre	4522	662
392	Cross Drainage Works	11.15	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-3 class of 800mm diameter in proper line, level and slope etc. complete.	CD.7 Page.Number 162	Running Metre	7063	662
393	Cross Drainage Works	11.16	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-3 class of 900mm diameter in proper line, level and slope etc. complete.	CD.7 Page.Number 162	Running Metre	7841	662
394	Cross Drainage Works	11.17	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-3 class of 1000mm diameter in proper line, level and slope etc. complete.	CD.7 Page.Number 162	Running Metre	8639	662
395	Cross Drainage Works	11.18	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-3 class of 1200mm diameter in proper line, level and slope etc. complete.	CD.7 Page.Number 162	Running Metre	11185	662
396	Cross Drainage Works	11.19	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-4 class of 900mm diameter in proper line, level and slope etc. complete.	CD 7 Page 167	Running Metre	8615	662
397	Cross Drainage Works	11.20	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-4 class of 1000mm diameter in proper line, level and slope etc. complete.	CD 7 Page 167	Running Metre	10512	662
398	Cross Drainage Works	11.21	CD 7	Providing and laying cement concrete pipe of IS 458:2003 NP-4 class of 1200mm diameter in proper line, level and slope etc. complete.	CD 7 Page 167	Running Metre	12325	662
399	Cross Drainage Works	11.22	CD 8	Providing cast in situ / ready mix block of M10 cement concrete with circular or other shaped opening for waterway including necessary formwork, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications (VSI sand finely washed etc), cement 4.40 bags/cumt)	CD.8 Page.Number 163	Cubic Meter	7531	2889
400	Cross Drainage Works	11.24	CD 27	Providing selected hard murum filling including laying in layers of 15 to 20cm with watering and compacting etc. complete.	CD.14 Page.Number 167	Cubic Meter	525	205
401	Cross Drainage Works	11.25	CD	Providing and laying in situ / ready mix M-20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab / Rigid pavement including compacting, finishing, curing etc. complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications (VSI sand finely washed etc), cement 6.40 bags/cumt)	CD.15 Page.Number 168 and B.7. Page Number 38	Cubic Meter	6540	1395
402	Cross Drainage Works	11.27	CD 27	Providing and fixing stream lined M-20 grade RCC guard stone including mild steel bar reinforcement etc. complete.	CD.20 Page.Number 169	Number	936	177

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
403	Cross Drainage Works	11.28	CD	Providing cast in situ / ready mix M10 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications (VSI sand finely washed etc), cement 4.40 bags/cumt)	CD 8 Page 163	Cubic Meter	7889	2889
404	Cross Drainage Works	11.29	CD	Providing cast in situ / ready mix M20 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA	CD 8 Page 163	Cubic Meter	8832	2889
405	Cross Drainage Works	11.30	CD	Providing and casting in situ / ready mix PCC M15 grade of trap metal for coping to head walls / parapet including centering, form work, compaction and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications (VSI sand finely washed etc)	Bd-E-7	Cubic Meter	8251	2889
406	Cross Drainage Works	11.31	CD	Providing and casting in situ / ready mix PCC M20 grade of trap metal for coping to head walls / parapet including centering, form work, compaction and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications (VSI sand finely washed etc)	Bd-E-8	Cubic Meter	8391	2889

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
407	Bridge Foundation and Sub Structure	12.02	BR 3A	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By /manual Means)	BR.3 Page Number 102	Cubic Metre	217	217
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
407	Bridge Foundation and Sub Structure	12.03	BR 3A	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By Mechanical Means)	BR.3 Page Number 102	Cubic Metre	86	12.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
408	Bridge Foundation and Sub Structure	12.04	BR 3B	Excavation for foundation in hard murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR.3 Page Number 102	Cubic Metre	216.00	106.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
409	Bridge Foundation and Sub Structure	12.06	BR 3C	Excavation for foundation in hard murum and boulders including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR.3 Page Number 102	Cubic Metre	258.00	141.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
410	Bridge Foundation and Sub Structure	12.08	BR 3D	Excavation for foundation in soft rock including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR.3 Page Number 102	Cubic Metre	515.00	212.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
411	Bridge Foundation and Sub Structure	12.09	BR 3E	Excavation for foundation in hard rock by blasting including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR.3 Page Number 102	Cubic Metre	1085.00	349.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
412	Bridge Foundation and Sub Structure	12.10	BR 3E	Excavation for foundation in hard rock by controlled blasting including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR.3 Page Number 102	Cubic Metre	1174.00	384.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
413	Bridge Foundation and Sub Structure	12.11	BR 3F	Excavation for foundation in hard rock by chiselling and wedging or line drilling including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR-3 Page Number 102	Cubic Metre	1763.00	1646.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
414	Bridge Foundation and Sub Structure	12.12	BR 3G	Excavation for foundation in laterite rock including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete.	BR.3 Page Number 102	Cubic Metre	1604.00	1467.00
		a		a) Upto 1.50m lift Normal Rate				
		b		b) 1.50m to 3.00m lift, Add 10%				
		c		c) 3.00m to 4.50m lift, Add 20%				
		d		d) 4.50m to 6.0m lift, Add 30%				
415	Bridge Foundation and Sub Structure	12.13	BR 3G	Providing and fixing 25mm diameter steel anchor dowel in hard rock including drilling hole of 32 mm diameter up to 0.75 mtrs depth, placing the dowel in position and effectively grouting the hole with CM 1:1 proportion etc. complete.	As directed by Engineer in charge.	Number	1356.00	422.00
416	Bridge Foundation and Sub Structure	12.22	BR 4 B	Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the the works and pumping out water during and after excavation as may be required by using 3.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary)	BR 4 Page No 104.105	Hour	167.00	124.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
417	Bridge Foundation and Sub Structure	12.23	BR 4 B	Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the the works and pumping out water during and after excavation as may be required by using 5.0 to 9.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary)	BR 4 Page No 104.105	Hour	189.00	124.00
418	Bridge Foundation and Sub Structure	12.24	BR 4 B	Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the the works and pumping out water during and after excavation as may be required by using 10.0 to 19.0 BHP pump etc. complete. (prior approval of Superintending Engineer will be necessary)	BR 4 Page No 104.105	Hour	211	124
419	Bridge Foundation and Sub Structure	12.25	BR 5A	Providing and laying in situ / ready mix / ready mix M10 cement concrete of trap/ granite/ quartzite/ gneiss metal in foundation including necessary centering, formwork, bailing out water, compacting and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with natural /artificial sand)	BR.5 Page Number 105 and B.7, Page Number 38	Cubic Metre	4980	789
420	Bridge Foundation and Sub Structure	12.27	BR 6	Providing uncoursed rubble stone masonry of trap/ granite/ quartzite/ gneiss metal in CM 1:5 for foundation of piers, abutments, wings etc. including bailing out of water, striking joints, scaffolding and watering etc. complete.	BR.6 Page Number 105	Cubic Metre	4399	2191
421	Bridge Foundation and Sub Structure	12.28	BR 8	Providing, fabricating, launching, floating and grounding in position steel curbs for wells with necessary steel bracings and steel cutting edges as shown in the detailed drawings and technical specifications etc. complete.	BR.8 Page Number 108	Metric Tonne	63812	18065
422	Bridge Foundation and Sub Structure	12.29	BR 9A	Providing and laying in situ / ready mix / ready mix CC M10 of trap/ granite/ quartzite/ gneiss metal in the hollow of the steel curbs including compacting by vibrating and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	BR.9 Page Number 109 and B.7, Page Number38	Cubic Metre	4832	1070
423	Bridge Foundation and Sub Structure	12.31	BR 10	Providing, fabricating and setting out MS cutting edge for RCC well curbs as per detailed drawings and technical specifications etc. complete.	BR.10 Page Number 110	Metric Tonne	57664	10764
424	Bridge Foundation and Sub Structure	12.32	BR 13A	Providing and laying in situ / ready mix / ready mix M20 RCC work with trap/ granite/ quartzite/ gneiss metal in well steining including shuttering, compacting by vibrating, finishing and curing etc. complete. (fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc), excluding reinforcement)	BR.13 Page Number 112 and B. 7, Page Number38	Cubic Metre	6309	1166

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
425	Bridge Foundation and Sub Structure	12.34	BR 13A	Providing and laying in situ / ready mix / ready mix M25 RCC work with trap/ granite/ quartzite/ gneiss metal in well steining including shuttering, compacting by vibrating, finishing and curing etc. complete. (fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc), excluding reinforcement)	BR.13 Page Number 112 and B. 7, Page Number38	Cubic Metre	6373	116
426	Bridge Foundation and Sub Structure	12.36	BR	Providing and laying in situ / ready mix / ready mix M20 RCC work with trap/ granite/ quartzite/ gneiss metal in well steining including shuttering, compacting by vibrating, finishing and curing etc. complete. (fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc), excluding reinforcement)	BR.13 Page Number 112 and B. 7, Page Number38	Cubic Metre	6665	1166
427	Bridge Foundation and Sub Structure	12.38	BR	Providing and laying in situ / ready mix / ready mix M25 RCC work with trap/ granite/ quartzite/ gneiss metal in well steining including shuttering, compacting by vibrating, finishing and curing etc. complete. (fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc), excluding reinforcement)	BR.13 Page Number 112 and B. 7, Page Number38	Cubic Metre	6728	1166
428	Bridge Foundation and Sub Structure	12.40	BR 14	Sinking of wells upto 5.0 metres diameter for foundation through all strata (except rock) to be removed by grabbing and chiselling soft disintegrated rock including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools, all materials available to sink through such strata including removal of obstacle and use of necessary plant and machinery, divers etc. and proper seating of the wells etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR.14 Page Number 113	Running Metre	38099	8426
429	Bridge Foundation and Sub Structure	12.41	BR 14	Sinking of wells above 5.0 metres and upto 6.0 metres diameter for foundation through all strata (except rock) to be removed by grabbing and chiselling soft disintegrated rock including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools, all materials available to sink through such strata including removal of obstacle and use of necessary plant and machinery, divers etc. and proper seating of the wells etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR.14 Page Number 113	Running Metre	48160	9049

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
430	Bridge Foundation and Sub Structure	12.42	BR 14	Sinking of wells above 6.0 metres and upto 7.0 metres diameter for foundation through all strata (except rock) to be removed by grabbing and chiselling soft disintegrated rock including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools, all materials available to sink through such strata including removal of obstacle and use of necessary plant and machinery, divers etc. and proper seating of the wells etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR.14 Page Number 113	Running Metre	52712	10859
431	Bridge Foundation and Sub Structure	12.43	BR 14	Sinking of wells above 7.0 metres and upto 8.0 metres diameter for foundation through all strata (except rock) to be removed by grabbing and chiselling soft disintegrated rock including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools, all materials available to sink through such strata including removal of obstacle and use of necessary plant and machinery, divers etc. and proper seating of the wells etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR.14 Page Number 113	Running Metre	74309	13232
432	Bridge Foundation and Sub Structure	12.44	BR 14	Sinking of wells above 8.0 metres and upto 9.0 metres diameter for foundation through all strata (except rock) to be removed by grabbing and chiselling soft disintegrated rock including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools, all materials available to sink through such strata including removal of obstacle and use of necessary plant and machinery, divers etc. and proper seating of the wells etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR.14 Page Number 113	Running Metre	83328	16851

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
433	Bridge Foundation and Sub Structure	12.45	BR 14	Sinking of wells above 9.0 metres and upto 10.0 metres diameter for foundation through all strata (except rock) to be removed by grabbing and chiselling soft disintegrated rock including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools, all materials available to sink through such strata including removal of obstacle and use of necessary plant and machinery, divers etc. and proper seating of the wells etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR.14 Page Number 113	Running Metre	89085	18038
434	Bridge Foundation and Sub Structure	12.46	BR 14	Extra charges for sinking of various diameter of well foundation in hard rock encountered during sinking by chiselling in water etc. complete.	BR. 14A Page Number 113	Cubic Metre	2595	2409
435	Bridge Foundation and Sub Structure	12.47	BR 16	Providing steel anchor dowel bars of 32 mm diameter and 4 m length at the base of the well including drilling holes of 60 mm diameter up to 2.5 m depth in rock, placing the dowels in position and effectively grouting the holes with CM 1:1 etc. complete.	BR.16 Page Number 120	Number	6305	1248
436	Bridge Foundation and Sub Structure	12.48	BR 16A	Providing steel anchor dowel bars of 32 mm diameter and 4 m length through steining of the wells including provision of necessary ducts through staining, drilling holes of 60 mm diameter up to 2.5 m depth in rock, placing the dowels in position and effectively grouting the holes with CM 1:1 etc. complete.	BR. 16 Page Number 120	Number	6683	1560
437	Bridge Foundation and Sub Structure	12.49	BR 17A	Providing and laying in situ / ready mix / ready mix M15 CC of trap/ granite /quartzite /gneiss metal for the bottom plugs of wells in the dry condition including compaction and curing wherever necessary etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	BR.17 Page Number 120 and B. 7, Page Number38	Cubic Metre	6314	1599
438	Bridge Foundation and Sub Structure	12.51	BR 17B	Providing and laying in situ / ready mix M15 CC of trap/ granite /quartzite /gneiss metal for the bottom plugs of wells under water including compaction and curing wherever necessary etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	BR.17 Page Number 120 and B. 7, Page Number38	Cubic Metre	6860	2047

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
439	Bridge Foundation and Sub Structure	12.55	BR 59 a	Providing and laying in situ / ready mix controlled grade of M15 of trap /granite /quartzite /gneiss metal for RCC works in cut off walls / curtain walls including necessary scaffolding, centering, compacting by vibrator, finishing and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) VSI sand crushed, excluding reinforcement)	As directed by Engineer in charge.	Cubic Metre	6376	1254
440	Bridge Foundation and Sub Structure	12.57	BR 59 a	Providing and laying in situ / ready mix controlled grade of M20 of trap /granite /quartzite /gneiss metal for RCC works in cut off walls / curtain walls including necessary scaffolding, centering, compacting by vibrator, finishing and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc), excluding reinforcement)	As directed by Engineer in charge.	Cubic Metre	7154	1254
441	Bridge Foundation and Sub Structure	12.59	BR 59 a	Providing and laying in situ / ready mix controlled grade of M25 of trap /granite /quartzite /gneiss metal for RCC works in cut off walls / curtain walls including necessary scaffolding, centering, compacting by vibrator, finishing and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc), excluding reinforcement)	As directed by Engineer in charge.	Cubic Metre	7218	1254
	Bridge Foundation and Sub Structure	12.67	BR	Providing and Constructing Temporary Island 16 m diameter for Construction of Well Foundation for 8m dia. Well. Note:- For other well diameters rate can be worked out on the basis of cross-sectional area of well. The diameter of the island shall be in the conformity with clause 1203.2 of MoRTH				
442		a		For depth of water 1.0 m and height of island to be 1.25 m.	BR.7. P.Number 107	Number	68956	10465
443		b		For depth of water 4.0 m and height of island 4.5 m.	BR.7. P.Number 107	Number	323926	81883
	Bridge Foundation and Sub Structure	12.68	BR	Providing and Constructing Temporary Island 12 m diameter for Construction of Well Foundation for 6 m dia. Well. Note:- For other well diameters rate can be worked out on the basis of cross-sectional area of well. The diameter of the island shall be in the conformity with clause 1203.2 of MoRTH				
444		a		For depth of water 1.0 m and height of island to be 1.25 m.	BR.7. P.Number 107	Number	40006	5887
445		b		For depth of water 4.0 m and height of island 4.5 m.	BR.7. P.Number 107	Number	200582	55732

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
446	Bridge : Bored Pile	12.70	MORTH	Back filling behind abutment, wing wall and return wall as per drawings and technical specifications etc. complete. (by granular material)	MORT and H 2200 &-710.1.4 of iRC 78	Cubic Metre	744	101
447	Bridge : Bored Pile	12.71	MORTH	Back filling behind abutment, wing wall and return wall as per drawings and technical specifications etc. complete. (by sandy material)	MORT and H 2200 &-710.1.4 of iRC 78	Cubic Metre	1464	101
448	Bridge : Bored Pile	12.72	MORTH	Providing and laying of filter media with granular materials/ stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition as per drawing and technical specifications etc. complete.	MORT and H 2200 &-710.1.4 of iRC 78	Cubic Metre	1126	135

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
449	Bridge Bearings	13.01	BR 34A	Providing and fixing neoprene bearing as per detailed drawings etc. complete.	As directed by Engineer in charge.	Cubic Centimetre	2.00	0.47
450	Bridge Bearings	13.02	BR	Providing tar paper bearing including laying in proper position etc. complete.	As directed by Engineer in charge	Square Metre	86	31
451	Bridge Bearings	13.04	MORTH	Supplying, fitting and fixing in position true to line and level cast steel rocker bearing conforming to IRC:83 (Pt-1) section IX and clause 2003 of MoRTH specifications including all accessories as per drawings and technical specifications etc. complete.	MORT and H - 2000,1000,2200 & IRC 83-1982	Metric Tonne	295	4
452	Bridge Bearings	13.05	MORTH	Supplying, fitting and fixing in position true to line and level forged steel rocker bearing including all accessories as per drawings and technical specifications conforming to IRC:83 (Pt-1) section IX and clause 2003 of MoRTH specifications etc. complete.	MORT and H 2000 and 2200	Metric Tonne	295	4
453	Bridge Bearings	13.06	MORTH	Supplying, fitting and fixing in position true to line and level sliding plate bearing with PTFE surface sliding on stainless steel including all accessories as per drawings and technical specifications and BS:5400, section 9.1 and 9.2 and clause 2004 of MoRTH specifications etc. complete.	MORT and H 2000 and 2200	Metric Tonne	274	11
454	Bridge Bearings	13.07	MORTH	Supplying, fitting and fixing in position true to line and level elastomeric bearing including all accessories as per drawing and technical specifications and IRC:83 (Pt-II) section IX and clause 2005 of MoRTH specifications etc. complete.	MORT and H 2000 and 2200	Cubic Centimetre	1.18	0.05
455	Bridge Bearings	13.08	MORTH	Supplying, fitting and fixing in position true to line and level sliding plate bearing with stainless steel plate sliding on stainless steel plate with mild steel matrix including all accessories as per drawings and technical specifications etc. complete.	MORT and H 2000 and 2200	Metric Tonne	270	8
456	Bridge Bearings	13.09	MORTH	Supplying, fitting and fixing in position true to line and level POT- PTFE bearing consisting of a metal piston supported by a disc or unreinforced elastomer confined within a metal cylinder, sealing rings, dust seals, PTFE surface sliding against stainless steel mating surface, complete assembly to be of cast steel / fabricated structural steel, metal and elastomer elements to be as per IRC: 83 part I and II respectively and other parts conforming to BS:5400, section 9.1 and 9.2 and clause 2006 of MoRTH specifications as per drawing and approved technical specifications etc. complete.	MORT and H 2000 and 2200	Metric Tonne	200	5
457	Bridge Super Structure	14.01	BR 35A	Providing, cutting, bending, hooking, tying and laying in position TMT FE 500 steel bars for reinforcement for all RCC works as per detailed drawings etc. complete.	BR.35 Page Number 134	Metric Tonne	63854	7562

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
458	Bridge Super Structure	14.02	BR 35B a	Providing and joining 25 mm diameter MS / TMT FE 500 steel reinforcement bars by bottle nuts including supplying and fitting them in position etc. complete.	As directed by Engineer in charge	Number	1121	697
459	Bridge Super Structure	14.03	BR 35B b	Providing and joining 32 mm diameter MS /TMT FE 500 steel reinforcement bars by bottle nuts including supplying and fitting them in position etc. complete.	As directed by Engineer in charge.	Number	1306	697
460	Bridge Super Structure	14.04	BR 36A	Providing welded joints for 25 mm and below diameter bars for steel reinforcement etc. complete.	BR.36 Page Number 134	Number	389	296
461	Bridge Super Structure	14.05	BR 36B	Providing welded joints for 32 mm and below diameter bars for steel reinforcement etc. complete.	BR.36 Page Number 134	Number	396	296
462	Bridge Super Structure	14.06	BR	Providing and fixing in position to the exact profile and prestressing the high tensile strands to specified ultimate strength, standard end anchorages, cable ducts, grouting ducts after prestressing and bearing plates with wedges as per detailed drawings including necessary plant and machinery for prestressing etc. complete.	As directed by Engineer in charge.	Metric Tonne	157833	8668
463	Bridge Super Structure	14.07	BR 38A	Providing and laying in situ / ready mix M-20 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(a) Page Number 135 and B. 7, Page Number38	Cubic Metre	9377	2889
464	Bridge Super Structure	14.15	BR	Providing and laying in situ / ready mix M-25 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(b and c) Page Number 135 and B. 7, Page Number38	Cubic Metre	9955	2889

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
465	Bridge Super Structure	14.17	BR	Providing and laying in situ / ready mix M-30 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(a) Page Number 135 and B. 7, Page Number38	Cubic Metre	10054	2889
466	Bridge Super Structure	14.19	BR 38A	Providing and laying in situ / ready mix M-20 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(b and c) Page Number 135 and B. 7, Page Number38	Cubic Metre	9707	2889
467	Bridge Super Structure	14.27	BR	Providing and laying in situ / ready mix M-25 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(b and c) Page Number 135 and B. 7, Page Number38	Cubic Metre	10305	2889

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
468	Bridge Super Structure	14.29	BR	Providing and laying in situ / ready mix M-30 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(b and c) Page Number 135 and B. 7, Page Number38	Cubic Metre	10408	2889
469	Bridge Super Structure	14.31	MORTH C1-2604	Providing and laying buried type expansion joint (expansion gap being 20mm) covered with 12mm thick 200 mm wide galvanised weldable structural steel plate as per IS 2062 placed symmetrically to the centre line of the joint, resting freely over the top surface of the deck concrete, welding of 8mm diameter 100mm long galvanised nails spaced 300mm intervals along the centre line of the plate, all as specified in MoRTH clause 2604 etc. complete.	BR.43 Page Number 138	Running Metre	786	195
470	Bridge Super Structure	14.32	BR 43A	Providing copper plate expansion joints as per detailed drawing Number 4/D-1 of 1972 D type etc. complete.	BR.43 Page Number 138	Running Metre	3846	195
471	Bridge Super Structure	14.33	BR 43B	Providing expansion joints with 25mm thick bituminous pad as per detailed drawings etc. complete.	BR.43 Page Number 138	Square Metre	863	118
472	Bridge Super Structure	14.34	BR 45	Providing and laying in situ / ready mix 1:4:8 cement concrete of trap /granite /quartzite /gneiss metal for haunch filling including compacting, curing, mixing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	B R.45 Page Number 139	Cubic Metre	4749	960
473	Bridge Super Structure	14.36	BR 46	Providing trap/ granite/ quartzite/ gneiss rubble filling over haunches and arches including hand packing etc. complete.	BR.46 Page Number 140	Cubic Metre	708	112
474	Bridge Super Structure	14.39	BR	Providing and laying in situ / ready mix M20 CC of trap/ granite/ quartzite/ gneiss metal for wearing course 8cm thick including compacting, finishing, curing and filling in joints with bitumen etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc)	BR.47(a) Page Number 140 and B. 7, Page Number38	Cubic Metre	5923	1058
475	Bridge Super Structure	14.41	BR 48	Providing vent holes 100mm diameter GI pipe in the slab and wearing course with iron grill at the top and GI pipe at bottom as per drawing etc. complete.	BR.48 Page Number 142	Number	543	56

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
476	Bridge Super Structure	14.44	BR	Providing and laying in situ / ready mix M20 RCC of trap/ granite/ quartzite/ gneiss metal for RCC work of ballast walls, kerbs and box returns including scaffolding, compaction, formwork finishing and curing etc. complete. (excluding reinforcement, with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc)	BR.50 Page Number 143 and B. 7, Page Number38	Cubic Metre		
				RCC work of Ballast walls & Kerb			8668	2842
				RCC work of Box returns			9351	2842
				RCC work of Box Cell			10034	2842
477	Bridge Super Structure	14.47	BR	Providing RCC parapet with CC M20 of trap/ granite/ quartzite/ gneiss metal with cast in situ/precast panels as per the detailed drawing including reinforcement, scaffolding, centering, formwork, compacting, finishing and curing etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer) fine aggregates of required specifications (VSI sand finely washed etc)	BR.51 (a) Page Number 144 and B. 7, Page Number38	Running Metre	1884	861
478	Bridge Super Structure	14.48	BR 51B	Providing railing of mild steel angle post 2.0m center to center of section 75mm x 75mm x 10mm or equivalent I/C section of height 1.05 above bridge surface with minimum anchor length of 30cm including hold fast of 25mm diameter MS bar welded at the bottom and concreting of 1:3:6 of size 30cm x 30cm x 30cm with three rows of 40mm B class GI pipe provided at 30cm on center to center including scaffolding and one coat of anticorrosive paint with two coats of oil painting, curing of concrete etc. complete.	B.R.51(b) Page Number 145	Running Metre	2846	34
479	Bridge Super Structure	14.49	BR 51C	Providing RCC railing of cast in situ / ready mix RCC posts with M20 CC of trap/ granite/ quartzite/ gneiss metal for horizontal and vertical members as per detailed drawings including reinforcement, scaffolding, centering, formwork, compaction, finishing and curing with watering chemical compound etc. complete. (fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) fine aggregates of required specifications (VSI sand finely washed etc)	BR.51(c) Page Number 145 and B. 7, Page Number38	Running Metre	1966	275
480	Bridge Super Structure	14.50	BR 55	Providing 100mm diameter GI water spouts as per detailed drawings in RCC slab and wearing surface / kerb etc. complete.	BR.55 Page Number 150	Number	909	280

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
481	Bridge Super Structure	14.55	MORTH	Providing and laying 6 mm thick mastic asphalt wearing course on top of deck slab excluding prime coat with paving grade bitumen meeting the requirements given in table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface including providing antiskid surface with bitumen precoated fine grained hard stone chipping at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surfaces not less than 100 deg C, protruding 1 mm to 4mm over mastic surface as per clause 515 etc. complete.	MORT and H 500, 2700	Square Metre	262	55
481a	Bridge Super Structure	14.55a	MORTH	Providing and laying 12 mm thick mastic asphalt wearing course on top of deck slab excluding prime coat with paving grade bitumen meeting the requirements given in table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface including providing antiskid surface with bitumen precoated fine grained hard stone chipping of 4.75 mm nominal size at the rate of 0.005 cum per 10 Square Metre and at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surfaces not less than 100 deg C, protruding 1 mm to 4mm over mastic surface as per clause 515 etc. complete.	MORT and H 500, 2700	Square Metre	385	99
482	Bridge Super Structure	14.56	MORTH	Construction of precast RCC railing of M30 Grade, aggregate size not exceeding 12 mm, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion as per approved drawings and technical specifications etc. complete.	MORT and H 2700, 1500, 1600 and 1700	Running Metre	1751	196
483	Bridge Super Structure	14.57	MORTH	Construction of RCC railing of M30 Grade in situ / ready mix with 20 mm nominal size aggregate true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, center to center spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete with fully automatic micro processor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) as per approved drawings and technical specifications etc. complete with fine aggregates of required specifications (VSI sand finely washed etc)	MORT and H 2700, 1500, 1600 and 1700	Running Metre	1848	196

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
484	Bridge Super Structure	14.58	MORTH	Providing and laying in PCC M15 grade leveling course below approach slab complete with fully automatic micro processor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) as per drawings and Technical specifications etc. complete with fine aggregates of required specifications (VSI sand finely washed etc)	MORT and H 1700 and 2700	Cubic Metre	5383	845
485	Bridge Super Structure	14.59	MORTH	Providing and laying of RCC in M30 grade approach slab including reinforcement and formwork complete with fully automatic micro processor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) as per drawings and technical specifications etc. complete with fine aggregates of required specifications (VSI sand finely washed etc)	MORT and H 1500, 1600, 1700 and 2700	Cubic Metre	9414	1176
486	Bridge Super Structure	14.60	MORTH	Providing, transporting and placing in position precast pretensioned concrete girders as per drawings and technical specifications etc. complete.	MORT and H 1800, 2300	Cubic Metre	22980	4048
487	Bridge Super Structure	14.61	MORTH	Providing and applying two coat of water based cement paint to un plastered concrete surface after cleaning the surface of dirt, dust, oil, grease, efflorescence etc. complete. (applying 1 litre paint on 2 Square Metret)	MORT and H 2800,	Square Metre	191	31
488	Bridge Super Structure	14.62	MORTH	Providing and laying a burried expansion joint, expansion gap being 20 mm, covered with 12 mm thick, 200 mm wide galvanized weldable structural steel plate as per IS: 2062, placed symmetrical to center line of the joint, resting freely over the top surface of the deck concrete, welding of 8 mm diameter 100 mm long galvanised nails spaced 300 mm c/c along the center line of the plate, all as specified in clause 2604 etc. complete.	MORT and H 2600	Running Metre	1801	29
489	Bridge Super Structure	14.63	MORTH	Providing and filling 20 mm thick compressible fibre board in expansion joint complete as per drawings and technical specifications etc. complete.	MORT and H 2600	Running Metre	345	10
490	Bridge Super Structure	14.64	MORTH	Providing and filling joint sealing compound with coarse sand and 6% bitumen by weight as per drawings and technical specifications etc. complete.	MORT and H 2600	Running Metre	41	29
491	Bridge Super Structure	14.65	MORTH	Providing and laying of asphaltic plug joint to provide for horizontal movement of 25 mm and vertical movement of 2 mm, depth of joint varying from 75 mm to 100 mm, width varying from 500 mm to 750 mm in traffic direction covered with a closure plate of 200 mm X 6 mm of weldable structural steel conforming to IS:2062, asphaltic plug to consist of polymer modified bitumen binder, carefully selected single size aggregate to 12.5mm nominal size and a heat resistant foam caulking /backer rod all as per approved drawings and specifications etc. complete.	MORT and H 2600	Running Metre	1351	65

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
492	Bridge Super Structure	14.66	MORTH	Providing and laying of an elastomeric slab steel expansion joint, catering to right or skew in less than 20 degree, moderately curved with maximum horizontal movement upto 50 mm to be installed by the manufacture / supplier or their authorized representative ensuring compliance to the manufactures instructions for installation for road and bridge works as per approved drawings and standard specifications etc. complete.	MORT and H 2600	Running Metre	11893	90
493	Bridge Super Structure	14.67	MORTH	Providing and laying of compression seal joint consisting of steel armoured nosing at two edges of the joint gap suitably anchored to the deck concrete and a preformed chloroprene elastomer or closed cell foam joint sealer compressed and fixed into the joint gap with special adhesive binder to cater for a horizontal movement upto 40 mm and vertical movement of 3 mm etc. complete.	MORT and H ? 2600	Running Metre	4350	54
494	Bridge Super Structure	14.68	MORTH	Providing and laying of a strip seal expansion joint catering to maximum horizontal movement upto 70 mm to be installed by the manufacturer / supplier to their authorized representative ensuring compliance to the manufacturers instruction for installation as per approved drawings and standard specifications etc. complete.	MORT and H ? 2600	Running Metre	12189	75
495	Bridge Super Structure	14.69	MORTH	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing not less than 40Kilogram each complete as per drawings and Technical specifications etc. complete. (boulder laid without wire crates)	MORT and H- 2500	Cubic Metre	1507	802
496	Bridge Super Structure	14.70	MORTH	Providing and laying of boulder apron laid in wire crates made with 4 mm dia GI wire conforming to IS:2801 and IS:4828 in 100 mm X 100 mm mesh weaved diagonally including 10% extra for laps and joints laid with stone boulder weighing not less than 40Kilogram each etc. complete.	MORT and H- 2500	Cubic Metre	2275	576
497	Bridge Super Structure	14.71	MORTH	Providing and laying of apron with cement concrete blocks of size 0.50X0.50X0.50m cast in situ / ready mix and made with nominal mix of M15 grade cement concrete with a minimum cement content of 250Kilogram/cum with fully automatic micro processor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) as per IRC:21-2000 etc. complete.	MORT and H- 2500	Cubic Metre	5802	1165
498	Bridge Super Structure	14.72	MORTH	Providing and laying pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and technical specifications etc. complete. (by stone/boulder)	MORT and H- 2500	Cubic Metre	1507	802

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
499	Bridge Super Structure	14.73	MORTH	Providing and laying pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete with fully automatic micro processor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) as per drawings and technical specifications etc. complete. (concrete blocks of size 0.30x0.30x0.30m in CC M15 grade) with fine aggregates of required specifications (VSI sand finely washed etc)	MORT and H-2500	Cubic Metre	5652	1022
500	Bridge Super Structure	14.74	MORTH	Providing and laying filter material underneath pitching in slopes as per drawings and technical specifications etc. complete.	MORT and H-2500	Cubic Metre	2201	894
501	Bridge Super Structure	14.75	MORTH	Laying of a geotextile filter between pitching and embankment slopes on which pitching is laid to prevent escape of the embankment material through the voids of the stone pitching / cement concrete blocks as well as to allow free movement of water without creating any uplift head on the pitching etc. complete.	MORT and H ? 700 and 1500	Square Metre	249	177
502	Bridge Super Structure	14.76	MORTH	Providing and laying rubble stone flooring laid in cement mortar 1:3 as per drawings and technical specifications etc. complete.	MORT and H 2500	Cubic Metre	5850	2034
503	Bridge Super Structure	14.77	MORTH	Providing and laying cement concrete blocks of M15 grade flooring laid in cement mortar 1:3 as per drawings and technical specifications etc. complete.	MORT and H 2500	Cubic Metre	6893	1513
504	Bridge Super Structure	14.78	MORTH	Construction of dry rubble flooring at cross drainage works etc. complete.	MORT and H 2500	Cubic Metre	3190	2484
505	Bridge Super Structure	14.79	MORTH	Construction of stone masonry curtain wall in cement mortar 1:3 as per drawings and technical specifications etc. complete.	MORT and H 2500	Cubic Metre	5210	2640
506	Bridge Super Structure	14.81	MORTH	Providing flexible apron of 100 cm thick comprising of loose stone boulders weighing not less than 40Kilogram beyond curtain wall etc. complete.	MORT and H ? 2500	Cubic Metre	1609	903
507	Bridge Super Structure	14.82	MORTH	Providing and construction of a gabian structure for retaining earth with segments of wire crates of size 7.0 x 3.0 x 0.6m each divided into 1.5 m compartments by cross netting, made from 4 mm galvansed steel wire @ 32Kilogram per 10 Square Metre having minimum tensile strength of 300Mpa conforming to IS:280 and galvanizing coating conforming to IS:4826 woven into mesh with double twist, mesh size not exceeding 100x100mm, filled with boulders with least dimension of 200mm, all loose ends to be tied with 4mm galvanized steel wire etc. complete.	MORT and H-2500	Cubic Metre	2221	188

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508	Bridge Super Structure	14.83	MORTH	Providing and constructing gabain structures for erosion control, river training works and protection works with wire crates of size 2.0m x 1.0m x 0.30m each divided into 1 m compartments by-cross netting, made from 4 mm galvanized steel wire @ 32Kilogramper 10Square Metre having minimum tensile strength of 300Mpa conforming to IS:280 and galvanizing coating conforming to IS 4826, wovan into mesh with double twist, mesh size not exceeding 100 x 100mm, filled with boulders with least dimension of 200mm, all loose ends to be securely tied with 4mm galvanized steel wire etc. complete.	MORT and H-2500	Cubic Metre	4163	670
509	Bridge Super Structure	14.84	MORTH	Removal of existing 75mm thick cement concrete wearing coat including its disposal complete as per technical specification without causing any detrimental effect to any part of the bridge structure and removal of dismantled material with all lifts and lead up to 1000m etc. complete.	MORT and H-2800	Square Metre	182	72
510	Bridge Super Structure	14.85	MORTH	Removal of existing asphaltic wearing coat comprising of 50mm thick asphaltic concrete laid over 12 mm thick mastic asphalt including disposal with all lift and lead upto 100m etc. complete.	MORT and H-2800	Square Metre	134	53
511	Bridge Super Structure	14.86	MORTH	Providing and laying cement concrete wearing coat M30 grade with batch mix type / concrete mixer with SCADA including reinforcement as per drawings and technical specifications etc. complete with fine agreeegates of required specifications (VSI sand finely washed etc)	MORT and H ? 2700	Cubic Metre	10688	1357
512	Bridge Super Structure	14.87	MORTH	Providing and laying of reinforced cement concrete in M-30 grade approach slab / Rigid Pavement including formwork complete with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) as per drawings and technical specifications etc. complete with fine agreeegates of required specifications (VSI sand finely washed etc) (excluding reinforcement)	MORT and H ? 1500, 1600, 1700 and 2700	Cubic Metre	7374	1176
513	Bridge Super Structure	14.88	BR 62	Providing and laying 0.90 meter thick metal mat consisting of rubble, oversize metal and normal size metal in specified thickness as per detailed drawing including supplying all materials, hand packing of rubble, spreading metal in layers and hard murum including watering and compaction with power roller etc. complete.	As directed by Engineer in charge	Square Metre	1172	112

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
514	Bridge Super Structure New Item	14.89	BR	Providing and laying in situ / ready mix M-35 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and Natural / VSI standard Artificial Sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(a) Page Number 135 and B. 7, Page Number38	Cubic Metre	10584	2889
515	Bridge Super Structure New Item	14.90	BR	Providing and laying in situ / ready mix M-40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and Natural / VSI standard Artificial Sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(a) Page Number 135 and B. 7, Page Number38	Cubic Metre	10779	2889
516	Bridge Super Structure New Item	14.91	BR	Providing and laying in situ / ready mix M-35 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and Natural / VSI standard Artificial Sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(b and c) Page Number 135 and B. 7, Page Number38	Cubic Metre	10957	2889

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
517	Bridge Super Structure New Item	14.92	BR	Providing and laying in situ / ready mix M-40 controlled cement concrete of trap/ granite/ quartzite/ gneiss metal for RCC work in main/ cross girders, diaphragms etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and Natural / VSI standard Artificial Sand) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	BR.38(b and c) Page Number 135 and B. 7, Page Number 38	Cubic Metre	11159	2889

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
518	Bridge : Bored Pile	15.02	BR	Providing and laying cast in situ / ready mix M30 RCC for 450 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2635	364
519	Bridge : Bored Pile	15.03	MORTH	Excavation for foundation of structure as per drawing and technical specifications including setting out, construction of shoring , brushing, removal of stumps and other deleterious matter, dressing of side and bottom and back filling with approved material etc. complete. (in marshy soil by mechanical means)	M.O.R.T and H - 304	Cubic Metre	726	211
520	Bridge : Bored Pile	15.04	BR	Providing and laying cast in situ / ready mix M30 RCC for 475 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2767	406
521	Bridge : Bored Pile	15.05	MORTH	Providing and filling annular space around footing in rock by using concrete of M15 grade etc. complete.	M.O.R.T and H - 2100	Cubic Metre	4974	716
522	Bridge : Bored Pile	15.06	BR	Providing and laying cast in situ / ready mix M30 RCC for 500 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2877	421
523	Bridge : Bored Pile	15.07	MORTH	Providing and filling sand in foundation trenches / below Raft as per drawing and technical specifications etc. complete. (Coarse Sand and Gravel)	M.O.R.T and H - 300,2100	Cubic Metre	2816	211

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
524	Bridge : Bored Pile	15.08	BR	Providing and laying cast in situ / ready mix M30 RCC for 525 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2993	393
525	Bridge : Bored Pile	15.09	MORTH	Providing stone masonry work in cement mortar 1:3 in foundation with watering complete as per drawings and technical specifications etc. complete. (coursed rubble masonry, first sort)	M.O.R.T and H - 1400	Cubic Metre	5193	2662
526	Bridge : Bored Pile	15.10	BR	Providing and laying cast in situ / ready mix M30 RCC for 550mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	3113	453
527	Bridge : Bored Pile	15.11	MORTH	Providing stone masonry work in cement mortar 1:3 in foundation with watering complete as per drawings and technical specifications etc. complete. (random rubble masonry)	M.O.R.T and H - 1400	Cubic Metre	4982	2434
528	Bridge : Bored Pile	15.12	BR	Providing and laying cast in situ / ready mix M30 RCC for 600mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4545	509
529	Bridge : Bored Pile	15.13	MORTH	Providing and laying PCC in M15 grade levelling course of 100 mm thick below pile cap with fully automatic micro processor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.	M.O.R.T and H - 1100, 1700	Cubic Metre	4731	1030

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
530	Bridge : Bored Pile	15.14	BR	Providing and laying cast in situ / ready mix M30 RCC for 625mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4683	528
531	Bridge : Bored Pile	15.15	MORTH	Providing Ist class brick masonry work in 1:3 in sub structure complete with watering as per drawings and technical specifications etc. complete. (excluding pointing and plastering)	MORT and H ? 1300, 2200	Cubic Metre	6315	1350
532	Bridge : Bored Pile	15.16	BR	Providing and laying cast in situ / ready mix M30 RCC for 650mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4827	548
533	Bridge : Bored Pile	15.18	BR	Providing and laying cast in situ / ready mix M30 RCC for 750mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7042	788
534	Bridge : Bored Pile	15.20	BR	Providing and laying cast in situ / ready mix M30 RCC for 800 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7420	864

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535	Bridge : Bored Pile	15.58	BR	Providing and laying cast in situ / ready mix M30 RCC for 825 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7716	931
536	Bridge : Bored Pile	15.60	BR	Providing and laying cast in situ / ready mix M30 RCC for 900 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	8385	1080
537	Bridge : Bored Pile	15.62	BR	Providing and laying cast in situ / ready mix M30 RCC for 975 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	9100	1235
538	Bridge : Bored Pile	15.64	BR	Providing and laying cast in situ / ready mix M30 RCC for 1000 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	11076	1389

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
539	Bridge : Bored Pile	15.66	BR	Providing and laying cast in situ / ready mix M30 RCC for 1050 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	12045	1491
540	Bridge : Bored Pile	15.68	BR	Providing and laying cast in situ / ready mix M30 RCC for 1100 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	13064	1624
541	Bridge : Bored Pile	15.70	BR	Providing and laying cast in situ / ready mix M30 RCC for 1200 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	15457	1970
542	Bridge : Bored Pile	15.72	BR	Providing and laying cast in situ / ready mix M30 RCC for 1500 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	24160	3063

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
543	Bridge : Bored Pile	15.110	BR	Providing and laying cast in situ / ready mix M35 RCC for 450 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2728	364
544	Bridge : Bored Pile	15.111	BR	Providing and laying cast in situ / ready mix M35 RCC for 475 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2869	406
545	Bridge : Bored Pile	15.112	BR	Providing and laying cast in situ / ready mix M35 RCC for 500 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2990	421
546	Bridge : Bored Pile	15.113	BR	Providing and laying cast in situ / ready mix M35 RCC for 525 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	3117	436

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
547	Bridge : Bored Pile	15.114	BR	Providing and laying cast in situ / ready mix M35 RCC for 550 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	3256	453
548	Bridge : Bored Pile	15.115	BR	Providing and laying cast in situ / ready mix M35 RCC for 600 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4710	509
549	Bridge : Bored Pile	15.116	BR	Providing and laying cast in situ / ready mix M35 RCC for 625 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4863	528
550	Bridge : Bored Pile	15.117	BR	Providing and laying cast in situ / ready mix M35 RCC for 650 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc) concrete batch mix plant / pan mixer etc. complete.	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	5022	548

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
551	Bridge : Bored Pile	15.118	BR	Providing and laying cast in situ / ready mix M35 RCC for 750 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7297	788
552	Bridge : Bored Pile	15.119	BR	Providing and laying cast in situ / ready mix M35 RCC for 800 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7713	864
553	Bridge : Bored Pile	15.120	BR	Providing and laying cast in situ / ready mix M35 RCC for 825 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7957	931
554	Bridge : Bored Pile	15.121	BR	Providing and laying cast in situ / ready mix M35 RCC for 900 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	8672	1080

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
555	Bridge : Bored Pile	15.122	BR	Providing and laying cast in situ / ready mix M35 RCC for 975 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	9440	1235
556	Bridge : Bored Pile	15.123	BR	Providing and laying cast in situ / ready mix M35 RCC for 975 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	11475	1410
557	Bridge : Bored Pile	15.124	BR	Providing and laying cast in situ / ready mix M35 RCC for 1050 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	12942	1514
558	Bridge : Bored Pile	15.125	BR	Providing and laying cast in situ / ready mix M35 RCC for 1100 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	13548	1649

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
559	Bridge : Bored Pile	15.126	BR	Providing and laying cast in situ / ready mix M35 RCC for 1200 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	16032	1999
560	Bridge : Bored Pile	15.127	BR	Providing and laying cast in situ / ready mix M35 RCC for 1500 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with fine aggregates of required specifications (VSI sand finely washed etc)	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	25054	3109
561	Bridge : Bored Pile	15.128	BR	Providing, placing and driving in position 6mm thick permanent MS liner up to required depth with 12 mm thick MS cutting edge of 0.50 meter length of bottom including fabricating, cutting the MS sheet to required diameter and shape, welding the joints and driving with the help of required machineries, all materials, labour and lift etc. complete.	MORTH 4th Revision Number1204 and 1904	Metric Tonne	80045	15993
562	Bridge : Bored Pile New Item	15.129	BR	Providing and laying cast in situ / ready mix M40 RCC for 450 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2755	364

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
563	Bridge : Bored Pile New Item	15.130	BR	Providing and laying cast in situ / ready mix M40 RCC for 475 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	2899	406
564	Bridge : Bored Pile New Item	15.131	BR	Providing and laying cast in situ / ready mix M40 RCC for 500 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	3008	421
565	Bridge : Bored Pile New Item	15.132	BR	Providing and laying cast in situ / ready mix M40 RCC for 525 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	3153	436

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
566	Bridge : Bored Pile New Item	15.133	BR	Providing and laying cast in situ / ready mix M40 RCC for 550 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	3296	453
567	Bridge : Bored Pile New Item	15.134	BR	Providing and laying cast in situ / ready mix M40 RCC for 600 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4757	509
568	Bridge : Bored Pile New Item	15.135	BR	Providing and laying cast in situ / ready mix M40 RCC for 625 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	4914	528

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
569	Bridge : Bored Pile New Item	15.136	BR	Providing and laying cast in situ / ready mix M40 RCC for 650 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sandoncrete batch mix plant / pan mixer etc. complete. (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	5077	548
570	Bridge : Bored Pile New Item	15.137	BR	Providing and laying cast in situ / ready mix M40 RCC for 750 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7371	788
571	Bridge : Bored Pile New Item	15.138	BR	Providing and laying cast in situ / ready mix M40 RCC for 800 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	7797	864

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
572	Bridge : Bored Pile New Item	15.139	BR	Providing and laying cast in situ / ready mix M40 RCC for 825 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	8047	931
573	Bridge : Bored Pile New Item	15.140	BR	Providing and laying cast in situ / ready mix M40 RCC for 900 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	8779	1080
574	Bridge : Bored Pile New Item	15.141	BR	Providing and laying cast in situ / ready mix M40 RCC for 975 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	9567	1235

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
575	Bridge : Bored Pile New Item	15.142	BR	Providing and laying cast in situ / ready mix M40 RCC for 1000 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	11607	1410
576	Bridge : Bored Pile New Item	15.143	BR	Providing and laying cast in situ / ready mix M40 RCC for 1050 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	13088	1514
577	Bridge : Bored Pile New Item	15.144	BR	Providing and laying cast in situ / ready mix M40 RCC for 1100 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	13708	1649

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
578	Bridge : Bored Pile New Item	15.145	BR	Providing and laying cast in situ / ready mix M40 RCC for 1200 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	16221	1999
579	Bridge : Bored Pile New Item	15.146	BR	Providing and laying cast in situ / ready mix M40 RCC for 1500 mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with VSI quality artifical sand (depth 0 to 5 metre) i) Add 30% extra for depth 5 to 10 m ii) Add 40% extra for depth 10 to 15 m iii) Add 60% extra for depth 15 to 20 m iv) Add 100% extra for depth above 20 m	BR-21 Page 124, MORTH - 1100 and 1700	Running Metre	25337	3109

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
580	Bridge Maintenance	16.01	BR	Providing and injecting epoxy grout including structuring of crack in the body of slab girder by sand blasting, fixing inlet tube arrangement including cost of materials, machinery required for the work and labour charges etc. complete.	As directed by Engineer in charge.	Kilogram	1279	162
581	Bridge Maintenance	16.02	BR	Repairing of honey combed or spilling area by chipping out the damaged spalled or honey combed portion of concrete up to rusted rebars, cleaning of all rust, scale and loose materials, scaffolding, compressed air machinery etc. complete. (item includes use of air compressor, chipping machine and scaffolding for height 8 to 10 meter)	As directed by Engineer in charge.	Square Metre	708	58
582	Bridge Maintenance	16.03	BR	Providing and applying well mixed polymer cement slurry in ratio 1:2 over well soaked but surface dry concrete and steel rebar for adhesion of fresh cement and sand mortar as per specification as directed etc. complete. (item includes use of polymers like sikalater or similar materials of relevant specification and scaffolding for height 8 to 10 meter)	As directed by Engineer in charge.	Square Metre	745	58
583	Bridge Maintenance	16.04	BR	Repairs of expansion joints by removing rich mix cement concrete including stacking the spoil as directed with all leads, lifts etc. complete. (use of equipments like air compressor is considered in the item)	As directed by Engineer in charge.	Square Metre	3374	1053
584	Bridge Maintenance	16.07	BR	Providing and laying in situ / ready mix M35 grade RCC jacketing work around the existing piers of bridges etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc), height of 8 to 10 meter)	As directed by Engineer in charge.	Cubic Metre	7293	1459
585	Bridge Maintenance	16.09	BR	Providing and injecting epoxy grout including structuring of cracks in the body of slab girder, fixing inlet tube arrangement including cost of materials, machinery required for the work labour charges etc. (2Kilogram of grout is considered per hole)	As directed by Engineer in charge.	Number	2545	324

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
586	Bridge : Bored Pile	17.01	BR	Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the unserviceable materials as directed etc. complete. 550 mm dia	MORT&H (5th Rev.) 1111	Running Meter	987	987
587	Bridge : Bored Pile	17.02	BR	Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the unserviceable materials as directed etc. complete. 650 mm dia	MORT&H (5th Rev.) 1111	Running Meter	1314	1314
588	Bridge : Bored Pile	17.03	BR	Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the unserviceable materials as directed etc. complete. 900mm dia	MORT&H (5th Rev.) 1111	Running Meter	1647	1647
589	Bridge : Bored Pile	17.04	BR	Extra for Chiselling in hard rocks including removing and stacking the loose material and disposing the unserviceable materials as directed etc. complete. 1000 mm dia	MORT&H (5th Rev.) 1111	Running Meter	2597	2597
590	Bridge : Well Foundation	17.05	BR	Providing and Constructing Temporary Island 16 m diameter for Construction of Well Foundation for 8m dia. Well. Note:- For other well diameters rate can be worked out on the basis of cross-sectional area of well. The diameter of the island shall be in the conformity with clause 1203.2 of MoRTH a) For depth of water 1.0 m and height of island to be 1.25 m. (Well Diameter - 8m), (Island Diameter- 16m)	MORT&H (5th Rev.) 1204	Number	74220	10465
591	Bridge : Well Foundation	17.06	BR	Providing and Constructing Temporary Island 16 m diameter for Construction of Well Foundation for 8m dia. Well. Note:- For other well diameters rate can be worked out on the basis of cross-sectional area of well. The diameter of the island shall be in the conformity with clause 1203.2 of MoRTH b) For depth of water 4.0 m and height of island to be 4.50 m. (Well Diameter - 8m), (Island Diameter- 16m)	MORT&H (5th Rev.) 1204	Number	370691	82443
592	Bridge : Well Foundation	17.07	BR	Sinking of 5 m Dia. well for foundation in hard strata (Hard Rock)/Boulder etc. which can be removed by grabing and chiselling soft disintegrated rock which requires special efforts, including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools and all materials available to sink through such strata including removal of obstacles and use of necessary plant and machinery, driver etc and proper setting of wells including all methods except pneumatic sinking (depth 0 to 5 Metres). Note : Add 1)30% Extra for 5 to 10 M depth 2)40% Extra for 10 to 15 M depth 3) 60% Extra for depth 15 M to 20 M 4) 100% Extra for depth above 20 M.	MORT&H (5th Rev.) 1208	Running Meter	55616	10980

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
593	Bridge : Well Foundation	17.08	BR	Sinking of 6 m Dia. well for foundation in hard strata (Hard Rock)/Boulder etc. which can be removed by grabing and chiselling soft disintegrated rock which requires special efforts, including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools and all materials available to sink through such strata including removal of obstacles and use of necessary plant and machinery, driver etc and proper setting of wells including all methods except pneumatic sinking (depth 0 to 5 Metres). Note : Add 1)30% Extra for 5 to 10 M depth 2)40% Extra for 10 to 15 M depth 3) 60% Extra for depth 15 M to 20 M 4) 100% Extra for depth above 20 M.	MORT&H (5th Rev.) 1208	Running Meter	83346	13906
594	Bridge : Well Foundation	17.09	BR	Sinking of 7 m Dia. well for foundation in hard strata (Hard Rock)/Boulder etc. which can be removed by grabing and chiselling soft disintegrated rock which requires special efforts, including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools and all materials available to sink through such strata including removal of obstacles and use of necessary plant and machinery, driver etc and proper setting of wells including all methods except pneumatic sinking (depth 0 to 5 Metres). Note : Add 1)30% Extra for 5 to 10 M depth 2)40% Extra for 10 to 15 M depth 3) 60% Extra for depth 15 M to 20 M 4) 100% Extra for depth above 20 M.	MORT&H (5th Rev.) 1208	Running Meter	97651	17553
595	Bridge : Well Foundation	17.10	BR	Sinking of 8 m Dia. well for foundation in hard strata (Hard Rock)/Boulder etc. which can be removed by grabing and chiselling soft disintegrated rock which requires special efforts, including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools and all materials available to sink through such strata including removal of obstacles and use of necessary plant and machinery, driver etc and proper setting of wells including all methods except pneumatic sinking (depth 0 to 5 Metres). Note : Add 1)30% Extra for 5 to 10 M depth 2)40% Extra for 10 to 15 M depth 3) 60% Extra for depth 15 M to 20 M 4) 100% Extra for depth above 20 M.	MORT&H (5th Rev.) 1208	Running Meter	136602	22646

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
596	Bridge : Well Foundation	17.11	BR	Sinking of 9 m Dia. well for foundation in hard strata (Hard Rock)/Boulder etc. which can be removed by grabing and chiselling soft disintegrated rock which requires special efforts, including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools and all materials available to sink through such strata including removal of obstacles and use of necessary plant and machinery, driver etc and proper setting of wells including all methods except pneumatic sinking (depth 0 to 5 Metres). Note : Add 1)30% Extra for 5 to 10 M depth 2)40% Extra for 10 to 15 M depth 3) 60% Extra for depth 15 M to 20 M 4) 100% Extra for depth above 20 M.	MORT&H (5th Rev.) 1208	Running Meter	146906	24127
597	Bridge : Well Foundation	17.12	BR	Sinking of 10 m Dia. well for foundation in hard strata (Hard Rock)/Boulder etc. which can be removed by grabing and chiselling soft disintegrated rock which requires special efforts, including blasting, large scale dewatering, heavy chiselling, cutting by pneumatic tools and all materials available to sink through such strata including removal of obstacles and use of necessary plant and machinery, driver etc and proper setting of wells including all methods except pneumatic sinking (depth 0 to 5 Metres). Note : Add 1)30% Extra for 5 to 10 M depth 2)40% Extra for 10 to 15 M depth 3) 60% Extra for depth 15 M to 20 M 4) 100% Extra for depth above 20 M.	MORT&H (5th Rev.) 1208	Running Meter	162292	27884
598	Bridge : Well Foundation	17.13	BR	Providing and constructing one span service road 10m wide to reach island location. For 1 pier location to another pier location (Depth of standing water 1 m)	MORT&H (5th Rev.) 1200	Running Meter	4286	143
599	Bridge : Well Foundation	17.14	BR	Providing and laying in situ / ready mix M-20 cement concrete Trap/ Granite/ Quartzite/ Gneiss metal for R.C.C. well curbs including necessary compacting by vibrating, finishing and curing complete. with fine agreeegates of required specifications (VSI sand finely washed etc) (excluding reinforcement and including shuttering) A) With Batch Mix Plant With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1205	Cubic Meter	6678	1510
600	Bridge : Well Foundation	17.15	BR	Providing and laying in situ / ready mix M-25 cement concrete Trap/ Granite/ Quartzite/ Gneiss metal for R.C.C. well curbs including necessary compacting by vibrating, finishing and curing complete. with fine agreeegates of required specifications (VSI sand finely washed etc) (excluding reinforcement and including shuttering) A) With Batch Mix Plant With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1205	Cubic Meter	6897	1510

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
601	Bridge : Well Foundation	17.16	BR	Providing and laying in situ / ready mix M-30 cement concrete Trap/ Granite/ Quartzite/ Gneiss metal for R.C.C. well curbs including necessary compacting by vibrating, finishing and curing complete. with fine aggregates of required specifications (VSI sand finely washed etc) (excluding reinforcement and including shuttering) A) With Batch Mix Plant With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1205	Cubic Meter	7050	1510
602	Bridge : Well Foundation	17.17	BR	Providing and laying in situ / ready mix M-35 cement concrete Trap/ Granite/ Quartzite/ Gneiss metal for R.C.C. well curbs including necessary compacting by vibrating, finishing and curing complete. with fine aggregates of required specifications (VSI sand finely washed etc) (excluding reinforcement and including shuttering) A) With Batch Mix Plant With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1205	Cubic Meter	6756	1510
603	Bridge : Well Foundation	17.18	BR	Providing and laying in situ / ready mix M-20 cement concrete trap / granite / quartzite / gneiss metal for the intermediate plug of wells in the dry or under water including compaction by vibrating and curing wherever necessary etc complete with fine aggregates of required specifications (VSI sand finely washed etc) D) INTERMEDIATE PLUG With Batch Mix Plant, With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1211	Cubic Meter	6386	1338
604	Bridge : Well Foundation	17.19	BR	Providing and laying in situ / ready mix M-25 cement concrete trap / granite / quartzite / gneiss metal for the intermediate plug of wells in the dry or under water including compaction by vibrating and curing wherever necessary etc complete with fine aggregates of required specifications (VSI sand finely washed etc) D) INTERMEDIATE PLUG With Batch Mix Plant, With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1211	Cubic Meter	6444	1338
605	Bridge : Well Foundation	17.20	BR	Providing and laying in situ / ready mix M-30 cement concrete trap / granite / quartzite / gneiss metal for the intermediate plug of wells in the dry or under water including compaction by vibrating and curing wherever necessary etc complete with fine aggregates of required specifications (VSI sand finely washed etc) D) INTERMEDIATE PLUG With Batch Mix Plant, With fully automatic micro processor based PLC with SCADA enabled	MORT&H (5th Rev.) 1211	Cubic Meter	6755	1478

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
606	Bridge : Well Foundation	17.21	BR	Providing and laying in situ / ready mix M-25 cement concrete of trap / granite / quartzite/ gniess metal for top plug of wells including compaction by vibration and curing etc complete centering formwork shall be of steel/plywood B) With Batch Mix Plant With fully automatic micro processor based PLC with SCADA enabled, fine agreeegates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1209	Cubic Meter	6621	1478
607	Bridge : Well Foundation	17.22	BR	Providing and laying in situ / ready mix M-30 cement concrete of trap / granite / quartzite/ gniess metal for top plug of wells including compaction by vibration and curing etc complete centering formwork shall be of steel/plywood B) With Batch Mix Plant With fully automatic micro processor based PLC with SCADA enabled fine agreeegates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1209	Cubic Meter	6755	1478
608	Bridge : Well Foundation	17.23	BR	Providing and laying in situ / ready mix M-25 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete well caps including necessary formwork compaction by vibrating finishing in CM 1:3 with fine agreeegates of required specifications (VSI sand finely washed etc) etc complete (Excluding reinforcement) A) Well Cap (With with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2205,2304	Cubic Meter	6790	1348
609	Bridge : Well Foundation	17.24	BR	Providing and laying in situ / ready mix M-30 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete well caps including necessary formwork compaction by vibrating finishing in CM 1:3 with fine agreeegates of required specifications (VSI sand finely washed etc) etc complete (Excluding reinforcement) A) Well Cap (With with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2205,2304	Cubic Meter	6925	1348
610	Bridge : Well Foundation	17.25	BR	Providing and laying in situ / ready mix M-35 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete well caps including necessary formwork compaction by vibrating finishing in CM 1:3 with fine agreeegates of required specifications (VSI sand finely washed etc) etc complete (Excluding reinforcement) A) Well Cap (With with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2205,2304	Cubic Meter	7193	1348
611	Bridge : Well Foundation	17.26	BR	Providing Sump pit in hard strata in wells as diercted or as shown in drawing including shoring and strutting as necessary and disposing of excavtd stuff	As directed by Engineer-in Charge	Cubic Meter	3851	2482
612	Bridge : Well Foundation	17.27	BR	Providing and filling in well with sand/ rubble and sand/ shingle and sand including compacting between the top and bottom plugs etc. Complete	MORT&H (5th Rev.) 1210	Cubic Meter	1433	224

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
613	Bridge sub structure and Foundation	17.28	BR	Providing and laying plain in situ / ready mix M-20 cement concrete of trap/ granite/quartzite/gneiss/crushed stone metal mechanically mixed, placed in foundation and compacted by vibration including necessary bailing out water, curing curing concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) (excluding dewatering by pump) for 14 days RCC Grade.With Concrete Mixer	MORT&H (5th Rev.) 1700	Cubic Meter	6744	1618
614	Bridge sub structure and Foundation	17.29	BR	Providing and laying plain in situ / ready mix M-25 cement concrete of trap/ granite/quartzite/gneiss/crushed stone metal mechanically mixed, placed in foundation and compacted by vibration including necessary bailing out water, curing curing concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) (excluding dewatering by pump) for 14 days RCC Grade.With Concrete Mixer	MORT&H (5th Rev.) 1700	Cubic Meter	7090	1618
615	Bridge sub structure and Foundation	17.30	BR	Providing and laying plain in situ / ready mix M-30 cement concrete of trap/ granite/quartzite/gneiss/crushed stone metal mechanically mixed, placed in foundation and compacted by vibration including necessary bailing out water, curing curing concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) (excluding dewatering by pump) for 14 days RCC Grade.With Concrete Mixer	MORT&H (5th Rev.) 1700	Cubic Meter	7002	1618
616	Bridge sub structure and Foundation	17.31	BR	Providing and laying plain in situ / ready mix M-35 cement concrete of trap/ granite/quartzite/gneiss/crushed stone metal mechanically mixed, placed in foundation and compacted by vibration including necessary bailing out water, curing curing concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) (excluding dewatering by pump) for 14 days RCC Grade.With Concrete Mixer	MORT&H (5th Rev.) 1700	Cubic Meter	7581	1594
617	Bridge sub structure and Foundation	17.32	BR	Providing and laying in situ / ready mix M-20 controlled reinforced cement concrete of trap metal for raft slab including "V" haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2304	Cubic Meter	5928	851

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
618	Bridge sub structure and Foundation	17.33	BR	Providing and laying in situ / ready mix M-25 controlled reinforced cement concrete of trap metal for raft slab including "V" haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2304	Cubic Meter	6042	851
619	Bridge sub structure and Foundation	17.34	BR	Providing and laying in situ / ready mix M-30 controlled reinforced cement concrete of trap metal for raft slab including "V" haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2304	Cubic Meter	6143	843
620	Bridge sub structure and Foundation	17.35	BR	Providing and laying in situ / ready mix M-35 controlled reinforced cement concrete of trap metal for raft slab including "V" haunches, formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2304	Cubic Meter	6023	843
621	Bridge sub structure and Foundation	17.36	BR	Providing and fixing pressure relief pipes of 110 mm diameter of PVC as per drawing for R.C.C Raft, galleries returns, abutments, wing wall etc complete.	MORT&H (5th Rev.) 2705, 2706	Running Meter	471	75
622	Bridge sub structure and Foundation	17.37	BR	Providing and laying weep holes of 100 mm diameter PVC pipes as per drawing for abutment returns, return walls etc. Complete.	MORT&H (5th Rev.) 2705, 2706	Running Meter	439	69

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
623	Bridge sub structure and Foundation	17.38	BR	Providing and laying in situ / ready mix M-15 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners (a) Height upto 5 M. (With Concrete Mixer)With fine agreegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204	Cubic Meter	6751	1758
624	Bridge sub structure and Foundation	17.39	BR	Providing and laying in situ / ready mix M-20 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners (a) Height upto 5 M. (With Concrete Mixer)With fine agreegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204	Cubic Meter	7443	1758

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
625	Bridge sub structure and Foundation	17.40		Providing and laying in situ / ready mix M-25 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners (a) Height upto 5 M. (With Concrete Mixer)With fine agreeegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.		Cubic Meter	7296	1758
626	Bridge sub structure and Foundation	17.41		Providing and laying in situ / ready mix M-30 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners (a) Height upto 5 M. (With Concrete Mixer)With fine agreeegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.		Cubic Meter	7533	1758

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
627	Bridge sub structure and Foundation	17.42		Providing and laying in situ / ready mix M-35 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners (a) Height upto 5 M. (With Concrete Mixer)With fine agreegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.		Cubic Meter	8525	1758
628	Bridge sub structure and Foundation	17.43	BR	Providing and laying in situ / ready mix M-20 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5..00 m in followinh manners b) Height upto 5 M. (With Batch Mix Plant) With fully automatic micro processor based PLC with SCADA enable with fine agreegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204	Cubic Meter	7910	1758

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
629	Bridge sub structure and Foundation	17.44	BR	Providing and laying in situ / ready mix M-25 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners b) Height upto 5 M. (With Batch Mix Plant) With fully automatic micro processor based PLC with SCADA enable with fine agreeegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204	Cubic Meter	8055	1758
630	Bridge sub structure and Foundation	17.45	BR	Providing and laying in situ / ready mix M-30 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in followinh manners b) Height upto 5 M. (With Batch Mix Plant) With fully automatic micro processor based PLC with SCADA enable with fine agreeegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204	Cubic Meter	8111	1758

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
631	Bridge sub structure and Foundation	17.46	BR	Providing and laying in situ / ready mix M-35 plain cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc. complete. as directed by engineer in charge basic rate shall be increased for height above 5.00 m in following manners b) Height upto 5 M. (With Batch Mix Plant) With fully automatic micro processor based PLC with SCADA enable with fine agreeegates of required specifications (VSI sand finely washed etc) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204	Cubic Meter	8604	1758
632	Bridge sub structure and Foundation	17.47	BR	Providing and laying in situ / ready mix M-20 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers,column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailling out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine agreeegates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2204, 2304	Cubic Meter	7332	1758

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
633	Bridge sub structure and Foundation	17.48	BR	Providing and laying in situ / ready mix M-25 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers,column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailling out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2204, 2304	Cubic Meter	7477	1758
634	Bridge sub structure and Foundation	17.49	BR	Providing and laying in situ / ready mix M-30 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers,column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailling out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	MORT&H (5th Rev.) 1700, 2204, 2304	Cubic Meter	7575	1758

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
635	Bridge sub structure and Foundation	17.50	BR	Providing and laying in situ / ready mix M-35 cement concrete of trap /granite/quartzite/ gneiss metal for cast in situ R.C.C. solid piers,column etc . including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete. Including plywood/steel formwork, centering (excluding dewatering by means of pump) and including bailling out water and including CM 1:3 curing complete. a) Height upto 5 M. (With Concrete Mixer) i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra over basic rate. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2204, 2304	Cubic Meter	8525	1758
636	Bridge sub structure and Foundation	17.51	BR	Providing trap/granite/quartzite/gneiss rubble filling over haunches and arches including hand packing. Spec. Number: BR.34 Page Number 146	MORT&H (5th Rev.) 1700, 1704	Cubic Meter	835	132
637	Bridge sub structure and Foundation	17.52	BR	Providing and laying in situ / ready mix controlled M-20 cement concrete of of trap / granite / quartzite/ gneiss metal for reinforced cement concrete caps over piers and abutments including necessary scaffolding plywood/steel formwork, compacting by vibrating, finishing in CM 1:3 and curing etc complete (Excluding reinforcement) With reversible drum type mixer/ concrete batch mix plant (pan mixer) . with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H(5th Rev.) 1700, 2205, 2304	Cubic Meter	7201	1790
638	Bridge sub structure and Foundation	17.53	BR	Providing and laying in situ / ready mix controlled M-25 cement concrete of of trap / granite / quartzite/ gneiss metal for reinforced cement concrete caps over piers and abutments including necessary scaffolding plywood/steel formwork, compacting by vibrating, finishing in CM 1:3 and curing etc complete (Excluding reinforcement) With reversible drum type mixer/ concrete batch mix plant (pan mixer) . with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H(5th Rev.) 1700, 2205, 2304	Cubic Meter	7916	1790
639	Bridge sub structure and Foundation	17.54	BR	Providing and laying in situ / ready mix controlled M-30 cement concrete of of trap / granite / quartzite/ gneiss metal for reinforced cement concrete caps over piers and abutments including necessary scaffolding plywood/steel formwork, compacting by vibrating, finishing in CM 1:3 and curing etc complete (Excluding reinforcement) With reversible drum type mixer/ concrete batch mix plant (pan mixer) . with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H(5th Rev.) 1700, 2205, 2304	Cubic Meter	8154	1790

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
640	Bridge sub structure and Foundation	17.55	BR	Providing and laying in situ / ready mix controlled M-35 cement concrete of of trap / granite / quartzite/ gniess metal for reinforced cement concrete caps over piers and abutments including necessary sacffolding plywood/steel formwork, compacting by vibrating, finishing in CM 1:3 and curing etc complete (Excluding reinforcement) With reversible drum type mixer/ concrete batch mix plant (pan mixer) . with fine agreeegates of required specifications (VSI sand finely washed etc)	MORT&H(5th Rev.) 1700, 2205, 2304	Cubic Meter	9005	1790
641	Bridge sub structure and Foundation	17.56	BR	Providing and placing Cage Unit, with 12 m Dia of each cage in the unit, for each support of staging for 6 m well foundation to two lane bridge, embedded 0.50m below the bed and raised 0.50m above HTL, comprising 25mm dia vertical HYSD bars/ ISMB Sections and bamboos within, strirrups of 25mm and 12mm dia - HYSD bars, including boulder filling with void filling and compaction, with reinforcement, Bolts, fabrication and placing cage in position as per design and drawing complete. 1). For depth of water 5.0 M (Item shall be included in Estimate with prior permission of SE, with due attention to site condition and actual requirement for creek bridges. Depth of standing water shall be verified and certified by EE for each span seperately, and accordinly provisions shall be made) For intermediate depth of water rate shall be derived by interpolation.	MORT&H (5th Rev.) 1814	Number	337830	25145
642	Bridge sub structure and Foundation	17.57	BR	Providing and placing Cage Unit, with 12 m Dia of each cage in the unit, for each support of staging for 6 m well foundation to two lane bridge, embedded 0.50m below the bed and raised 0.50m above HTL, comprising 25mm dia vertical HYSD bars/ ISMB Sections and bamboos within, strirrups of 25mm and 12mm dia - HYSD bars, including boulder filling with void filling and compaction, with reinforcement, Bolts, fabrication and placing cage in position as per design and drawing complete. 1). For depth of water 10.0 M (Item shall be included in Estimate with prior permission of SE, with due attention to site condition and actual requirement for creek bridges. Depth of standing water shall be verified and certified by EE for each span seperately, and accordinly provisions shall be made) For intermediate depth of water rate shall be derived by interpolation.	MORT&H (5th Rev.) 1814	Number	817161	76245

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
643	Bridge Super Structure	17.58	BR	Providing and laying in situ / ready mix M-20 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	6412	1242
644	Bridge Super Structure	17.59	BR	Providing and laying in situ / ready mix M-25 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	6214	1242
645	Bridge Super Structure	17.60	BR	Providing and laying in situ / ready mix M-30 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	6657	1242
646	Bridge Super Structure	17.61	BR	Providing and laying in situ / ready mix M-35 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	7113	1242
647	Bridge Super Structure	17.62	BR	Providing and laying in situ / ready mix M-40 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine aggregates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	7166	1242

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
648	Bridge Super Structure	17.63	BR	Providing and laying in situ / ready mix M-45 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	7306	1242
649	Bridge Super Structure	17.64	BR	Providing and laying in situ / ready mix M-50 cement concrete of trap / granite / quartzite/ gniess metal for reinforced cement concrete block below the bearing including necessary scaffolding, plywood/steel formwork, compaction by vibrating, finishing in CM 1:3 and curing complete (Excluding reinforcement) Using reversible drum type mixer/ concrete batch mix plant (pan mixer) with fine agreeegates of required specifications (VSI sand finely washed etc)	MORT&H (5th Rev.) 1700, 2205, 2304	Cubic Meter	7821	1242
650	Bridge Super Structure	17.65	BR	Providing and cutting bending, hooking, laying in position and tying HCRM/ CRS for reinforcement as per detailed drawings for R.C.C. work Note : Where item no 34(c) considered in estimate, Anti Corrosive Treatment Shall not be considered additionaly. HCRM : High Corrosion Resistance Marine. CRS : Corrosion Resistance Steel.	Specifications : MORT&H (5th Rev.) 1600	Metric Tonne	68640	7562
651	Bridge : Well Foundation	17.66	BR	Chipping and dressing of the R.C.C. piles upto 0.60 meter including cleaning reinforcement and removal of dismantled materials upto a distance of 50 meter beyond the building area etc. for providing pile caps.	Specifications : MORT&H (5th Rev.) 2604	Number	622	622
652	Bored Pile, Well Foundation, sub & Super Structure	17.67		Supply of all types of Structural steel conforming to Fe 410 B of IS 2062, Fabrication, assembling, erection / slewing/ end launching of Steel girders (NOT requiring traffic block) upto 45.7 m span on sub structure incl. provision of trolley refuges, incl. loading, unloading, lift and taxes complete, assembly of girders on drift/ bolts, field riveting/ welding, assembling of temporary support for side slewing, raising of girders to the bed block level, providing sliding arrangements (Material at site, fabrication at site, erection / launching etc only) PLATE GIRDER / Semi Through Girder		M.T	102061	25708
653	Bored Pile, Well Foundation, sub & Super Structure	17.68		Extra for working under running traffic / traffic block conditions for above Items.		M.T	20412	NA
654	Bored Pile, Well Foundation, sub & Super Structure	17.69		Metalizing of steel work of girder with grit blasting as per IRS - B1-2011 following by one coat of etch primer (as per IS:5666) one coat of Zinc Chrome primer (as per IS:104) and two coats of aluminium paint (as per IS:2339) with all labour, tools,plants and materials.		Square Metre	169	48

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
655	Bored Pile, Well Foundation, sub & Super Structure	17.70		Providing sacrificial shuttering for deck slab made up with galvanised Cold Rolled Cold Annealed (CRCA) steel of 310 MPA Grade with all Contractor's material, labour, erection fixing, welding etc. (Decking Sheet)		M.T	63208	3061
656	Bored Pile, Well Foundation, sub & Super Structure	17.71		Providing and removing barricading with the help of portable fencing along the running track where the work is to be done in close vicinity of the track. Fencing shall consist of self supporting steel angles of size 50 x50x6mm, 1.5m long provided with hooks etc. and embedded in CC 1:2:4 block of size 0.23x0.23x0.23M placed at c/c distance of 2.0 M along the track. 12 mm dia rods in three horizontal layers tack welded with the angle posts including providing Retro-reflective tapes in Horizontal & vertical direction. Note : Released material will be the property of the contractor after the completion of work. Cost of cement to be paid separately.		Running metre	559	34
657	Bored Pile, Well Foundation, sub & Super Structure	17.72		Load testing of one or more spans of bridge as selected by the Engineer as per approved load test procedure following relevant IS/IRC / Railway codes with contractor's labour, deflection measuring instruments, loading materials, recording and analyzing the load testing results including all leads and lifts etc. completeas required. The rates are all inclusive and will be paid after load test is finished and girder is cleared of the kentledges/ loading materials etc. The load shall be 1.25 times the stipulated design load based on Design load & not span (for Span design load upto 100 MT.)		PER TEST	132784	96408
658	Bored Pile, Well Foundation, sub & Super Structure	17.73		Load testing of one or more spans of bridge as selected by the Engineer as per approved load test procedure following relevant IS/IRC / Railway codes with contractor's labour, deflection measuring instruments, loading materials, recording and analyzing the load testing results including all leads and lifts etc. completeas required. The rates are all inclusive and will be paid after load test is finished and girder is cleared of the kentledges/ loading materials etc. The load shall be 1.25 times the stipulated design load based on Design load & not span (Extra for every increase of 100.00mt. or part there for in the span load capacity up to 800.00 mt.)		PER TEST	131582	96408

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
659	Arch Bridge	18.01		Providing factory made hydraulically pressed mechanically vibrated and compacted Precast Ready Mix M-30 controlled cement concrete of trap /granite/quartzite/gneiss metal Blocks of 520 mm top & 460 mm bottomX1000mm length and 400mm thick having various cross section areas for assembly of Arch Strip, including lifting hooks, including machined surfaced laser cut, trapezoidal steel moulds. As specified and as per IS 456:2000 including cost of all materials, preparation of casting bed, manufacturing, curing, removing from steel moulds by using crane or required machinery and stacking of blocks for preparation of arch strip of various lengths, including lead of all materials up to RMC plant, with fully automatic micro processor based PLC with SCADA enabaled concrete Batch Mix Plant (PAN Mixer)with Crushed sand VSI Grade. etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Number	3006	225
660	Arch Bridge	18.02		Providing factory made hydraulically pressed mechanically vibrated and compacted Precast Ready Mix M-40 controlled cement concrete of trap /granite/quartzite/gneiss metal Blocks of 520 mm top & 460 mm bottomX1000mm length and 400mm thick having various cross section areas for assembly of Arch Strip, including lifting hooks, including machined surfaced laser cut, trapezoidal steel moulds. As specified and as per IS 456:2000 including cost of all materials, preparation of casting bed, manufacturing, curing, removing from steel moulds by using crane or required machinery and stacking of blocks for preparation of arch strip of various lengths, including lead of all materials up to RMC plant, with fully automatic micro processor based PLC with SCADA enabaled concrete Batch Mix Plant (PAN Mixer)with Crushed sand VSI Grade. etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Number	3099	225
661	Arch Bridge	18.03		Providing factory made hydraulically pressed mechanically vibrated and compacted Precast Ready Mix M-50 controlled cement concrete of trap /granite/quartzite/gneiss metal Blocks of 520 mm top & 460 mm bottomX1000mm length and 400mm thick having various cross section areas for assembly of Arch Strip, including lifting hooks, including machined surfaced laser cut, trapezoidal steel moulds. As specified and as per IS 456:2000 including cost of all materials, preparation of casting bed, manufacturing, curing, removing from steel moulds by using crane or required machinery and stacking of blocks for preparation of arch strip of various lengths, including lead of all materials up to RMC plant, with fully automatic micro processor based PLC with SCADA enabaled concrete Batch Mix Plant (PAN Mixer)with Crushed sand VSI Grade. etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Number	3333	225

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
662	Arch Bridge	18.04		Providing factory made hydraulically pressed mechanically vibrated and compacted Precast Ready Mix M-30 controlled cement concrete of trap /granite/quartzite/gneiss metal Socket Blocks of 520 mm top & 460 mm bottom x1000mm length and 300mm thick having various cross section areas for assembly of Arch Strip, including lifting hooks, including machined surfaced laser cut, trapezoidal steel moulds. As specified and as per IS 456:2000 including cost of all materials, preparation of casting bed, manufacturing, curing, removing from steel moulds by using crane or required machinery and stacking of blocks for preparation of arch strip of various lengths, including lead of all materials up to RMC plant, with fully automatic micro processor based PLC with SCADA enabaled concrete Batch Mix Plant (PAN Mixer)with Crushed sand VSI Grade. etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Number	4729	243
663	Arch Bridge	18.05		Providing factory made hydraulically pressed mechanically vibrated and compacted Precast Ready Mix M-40 controlled cement concrete of trap /granite/quartzite/gneiss metal Socket Blocks of 520 mm top & 460 mm bottom x1000mm length and 300mm thick having various cross section areas for assembly of Arch Strip, including lifting hooks, including machined surfaced laser cut, trapezoidal steel moulds. As specified and as per IS 456:2000 including cost of all materials, preparation of casting bed, manufacturing, curing, removing from steel moulds by using crane or required machinery and stacking of blocks for preparation of arch strip of various lengths, including lead of all materials up to RMC plant, with fully automatic micro processor based PLC with SCADA enabaled concrete Batch Mix Plant (PAN Mixer)with Crushed sand VSI Grade. etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Number	4847	243
664	Arch Bridge	18.06		Providing factory made hydraulically pressed mechanically vibrated and compacted Precast Ready Mix M-50 controlled cement concrete of trap /granite/quartzite/gneiss metal Socket Blocks of 520 mm top & 460 mm bottom x1000mm length and 300mm thick having various cross section areas for assembly of Arch Strip, including lifting hooks, including machined surfaced laser cut, trapezoidal steel moulds. As specified and as per IS 456:2000 including cost of all materials, preparation of casting bed, manufacturing, curing, removing from steel moulds by using crane or required machinery and stacking of blocks for preparation of arch strip of various lengths, including lead of all materials up to RMC plant, with fully automatic micro processor based PLC with SCADA enabaled concrete Batch Mix Plant (PAN Mixer)with Crushed sand VSI Grade. etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Number	4922	243

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
665	Arch Bridge	18.07		Providing and laying M-50 grade Ready Mix cement concrete of 60mm thickness, mechanically vibrated and compacted above linearly and parallelly arranged precast blocks placed on ISMC 100 base to form a layer of screed concrete over unit arch strip. Including HYFLEX steel wire rope – 6 X 36, steel core fixed with aluminum ferrules of required size and shape in individual block, for connecting blocks in unit arch strip. Including crimping of each ferule with wire rope using embedded steel bar of 8mm diameter and 150mm in length. Including 10mm dia steel rods for fixing wire ropes. Including Z-plate acting as form work and steel separation plate of 10mm thickness over individual joint. As specified and as per IS 456:2000 including cost of all materials, preparation of level bed, curing, , including lead of all materials up to RMC plant / casting yard, etc. complete. as directed by the Engineer in charge.	As directed by Engineer-in Charge	Square Metre	4753	311
666	Arch Bridge	18.08		Providing Lifting, transportation and placing activities of precast arch units and sockets from casting yard / RMC plant to construction site including all necessary lifting arrangements in hydraulic telescopic cranes of appropriate lifting capacity, transportation on flat bed trailer of required length, including lifting slings with D-shackle, pulling ratchets, including ISMC 300 steel supporting cross beam, two numbers of P type 10 ton capacity chain pulley , including temporary supports for lifting and transporting on trailers, including construction of leveling platform crane and trailer, including scaffolding and platform at pier / abutment top level, including necessary all manpower., etc. complete., as directed by Engineer In Charge.	As directed by Engineer-in Charge	Metric Tonne	3573	289

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
667	Bridge Maintenance New Item	19.01	BR	Providing and fabricating structural steel work for Sakav Decking in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.	As directed by Engineer in Charge	Metric Tonne	73203	12598
668	Bridge Maintenance New Item	19.02	BR	Providing epoxy mortar with quartz sand with proportion epoxy concrete sand 1:6 for repairs to the cracked pier, girder etc including chipping the loose cracked concrete cleaning rust by means of brush, sand blasting and rebuilding the section giving minimum 3 day compressive strenght of 525 Kilogram/cm2 and maximum epoxy consumption of 315 Kilogram/m3 of mortar with all materails labour equipment etc complete (Quartz Sand 885 Kilogram/Cum)	As directed by Engineer in Charge	Cubic Meter	246626	18290
669	Bridge Maintenance New Item	19.03	BR	Providing and laying epoxy concrete with epoxy aggregate proportion 1:4 using epoxy fine quartz sand, course quartz sand and trap metal in suitable proportion by weight including weighing, mixing placing inclusive of celaning the surface by wire, brush, sand balsting for applying the tackcoat of epoxy as directed and giving minimum 3 days compressive strength of 525 Kilogram/cm2 and maximum epoxy consumption of 214 Kilogram/m3 of concrete including necessary formwork with all materials, labour, centering equipment etc complete as directed. (scaffolding will be paid separately if required)(Fine sand 660 Kilogram/Cum, Course Sand 660Kilogram/Square Metre, Trap metal 660 Kilogram/Square Metre)	As directed by Engineer in Charge	Cubic Meter	143153	14067
670	Bridge Maintenance New Item	19.04	BR	Providing and applying epoxy paint primer with middle coat and top coat to superstructure including scaffolding etc complete.	As directed by Engineer in Charge	Square Meter	606	276
671	Bridge Repair New Item	19.05	BR	Making and working inside steel cages for crocodile including handling the same with suitable hanging arrangements	As directed by Engineer in Charge	Number	518593	1244
672	Bridge Repair New Item	19.06	BR	Underwater Inspection : Underwater inspection cum video graph shall be arranged by divers to inspect from the cavity of well foundation and mapping of the cavity. A) Before rectification work	As directed by Engineer in Charge	Number	150060	39000
673	Bridge Repair New Item	19.07	BR	Underwater Inspection : Underwater inspection cum video graph shall be arranged by divers to inspect from the cavity of well foundation and mapping of the cavityB) After rectification work	As directed by Engineer in Charge	Number	77592	15600
674	Bridge Repair New Item	19.08	BR	Underwater Surface Preparation: Crack surface shall be cleaned using underwater jet to remove the fungal growth and other foreign materials to enable a clean and visible surface. The item includes the cost of hire charges of all equipment, diving equipment and all charges for divers etc., complete.	As directed by Engineer in Charge	Running Meter	810	650

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
675	Bridge Repair New Item	19.09	BR	Underwater Crack Groove Cutting: Groove shall be cut using under water concrete cutting machine of size of 50 mm wide and 75 mm deep on each side of the crack to form as "V" groove all along the crack to fill the underwater polyester resin/ Epoxy putty (horizontal and vertical cracks). After the groove cutting, the concrete shall be removed from the groove using the pneumatic concrete chipping machine to form "V" groove. The item includes the cost of hire charges of pneumatic equipment, air compressor and all charges for divers with accessories etc., complete.	As directed by Engineer in Charge	Running Meter	2430	1950
676	Bridge Repair New Item	19.10	BR	Underwater Crack Sealing/Filling using underwater Epoxy mortar : Under water Epoxy putty shall be mixed using the slow speed heavy duty mixing machine to obtain a uniform mix. The mixed materials shall be placed all along the prepared "V" groove and finished smoothly using the putty blade/ trowel within 30 minutes by using the divers. The finished surface shall be allowed for curing minimum of 24 hours to attain the strength. The item includes the cost all materials, hire charges for all machineries and all charges for divers with accessories etc., complete. Make - Material of reputed manufacturer	As directed by Engineer in Charge	Kilogramme	2165	1300
677	Bridge Repair New Item	19.11	BR	Underwater P/Fixing the Nozzle for high pressure underwater epoxy grout: Drilling hole of 12/ 18 mm dia to a depth of minimum 100 mm across the crack to an angle of 45° @ 500 mm C/C, using pneumatic drilling machine without disturbing the epoxy mortar filled on the "V" groove with the help of divers. The nozzle shall be inserted in the drilled hole and fixed using the under water polyester resin grout and allowed for curing for final set. The item includes the cost of all materials, hire charges for all machineries and all charges for divers with accessories etc., complete.	As directed by Engineer in Charge	Number	1101	650
678	Bridge Repair New Item	19.12	BR	Underwater for high pressure underwater epoxy grout: Grouting with Water Insensitive Underwater Epoxy Grout Base and hardener shall be mixed with using hand held heavy duty electrically operated mixing machine until uniform mix is obtained. The mixed material shall be poured in to the high pressure grouting machine container and grouted through the non-return nozzle already fixed on cracks. The grouting shall be done from the bottom of crack until grout rejects of all other grouting ports. The grouting shall be carried out with the help of divers and underwater communication device to know the conditions. The item includes the cost of all materials, hire charges for all machineries and all charges for divers with accessories etc., complete.	As directed by Engineer in Charge	Kilogramme	2376	1300
679	Bridge Repair New Item	19.13	BR	Providing fixing of dowel rod of 16 mm dia in the river bed for 400 mm depth @ 1000 mm c/c in single layer and grouting with underwater epoxy grout includes the cost of hire charges of all machineries, barge, boat, cost of all tools and all labour charges etc., complete.	As directed by Engineer in Charge	Number	4309	2600

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
680	Bridge Repair New Item	19.14	BR	Providing fixing of shear links of 12 mm dia in the periphery of the well wall for 100 mm mm depth @ 500 mm c/c bothway and grouting with underwater epoxy grout includes the cost of hire charges of all machineries, barge, boat, cost of all tools and all labour charges etc., complete.	As directed by Engineer in Charge	Number	885	650
681	Bridge Repair New Item	19.15	BR	Providing Filling of concrete encasing of grade M35 around the periphery of the pier of 500 mm thick upto 3.5 m from the river bed level including Scarifical leakproof MS shuttering includes the cost of hire charges of all machineries, barge, boat, cost of all tools and all labour charges etc., complete.	As directed by Engineer in Charge	Cubic Meter	94192	7410
682	Bridge Repair New Item	19.16	BR	Surface Preparation: Crack surface shall be cleaned using underwater jet to remove the fungal growth and other foreign materials to enable a clean and visible surface. The item includes the cost of hire charges of all equipment, diving equipment and all charges for divers etc., complete.	As directed by Engineer in Charge	Running Meter	744	592
683	Bridge Repair New Item	19.17	BR	Crack Groove Cutting: Groove shall be cut using hand held electrically operated concrete cutting machine of size of 50 mm wide and 75 mm deep on each side of the crack to form as "V" groove all along the crack to fill the polyester resin/ Epoxy putty (horizontal and vertical cracks). After the groove cutting, the concrete shall be removed from the groove using the pneumatic concrete chipping machine to form "V" groove. The item includes the cost of hire charges for all machineries, tools and barges and all labour charges etc., complete.	As directed by Engineer in Charge	Running Meter	860	592
684	Bridge Repair New Item	19.18	BR	Crack Sealing/Filling using epoxy mortar: Base and hardener of the high strength repair mortar . Epoxy putty shall be mixed using the slow speed heavy duty mixing machine to obtain a uniform mix. The mixed materials shall be placed all along the prepared "V" groove and finished smoothly using the putty blade/ trowel within 30 minutes by using the divers. The finished surface shall be allowed for curing minimum of 24 hours to attain the strength. The item includes the cost of hire charges of all equipment , tools and plants and all labour charges etc., complete.	As directed by Engineer in Charge	Kilogramme	1293	592
685	Bridge Repair New Item	19.19	BR	P/Fixing of 12 mm nozzle in the crack portion @ 500 c/c including material, labour complete in all respect.	As directed by Engineer in Charge	Number	854	592
686	Bridge Repair New Item	19.20	BR	Providing Repairing of honeycombs and minor damages with Polymer Modified Morter including material,labour complete in all respect.	As directed by Engineer in Charge	Kilogramme	169	84

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
687	Bridge Repair New Item	19.21	BR	Application of Protective coating Supply and application of Siliane/ Siloxane primer. Primer shall be applied by brush/ sprayed over the prepared concrete surface at 0.30 to 0.40 litter/ Square Metre by using the airless nozzle gun. After applying primer coat, Single component aliphatic acrylate UV resistant protective cum decorative coat DEKilogramUARD S or similar shall be applied over the primed surface using airless nozzle gun in two coats and each coat shall b e 150 microns DFT. Including cost of all materials, cost of hire charges of tools and plants and all labour charges etc. complete. Make - Fosroc or equivalent product of BASF/ SIKA or other similar firm.	As directed by Engineer in Charge	Square Meter	1139	592
688	Bridge Repair New Item	19.22	BR	Providing Boulder to the cavity area of 75-200mm in size includes the cost of hire charges of all machineries, barge, boat, cost of all tools and all labour charges etc., complete.	As directed by Engineer in Charge	Cubic Meter	4214	2484
689	Bridge Repair New Item	19.23	BR	Providing filling of Micro-concrete and 10 mm aggregate (1:1) including scarificial leakproof MS shuttering includes the cost of hire charges of all machineries, barge, boat, cost of all tools and all labour charges etc., complete.	As directed by Engineer in Charge	Cubic Meter	113577	23400
690	Bridge Repair New Item	19.24	BR	Providing Grounting of nozzles with Low Viscosity Epoxy grout including material, labour complete in all respect.	As directed by Engineer in Charge	Cubic Meter	1521	592
691	Bridge Repair New Item	19.25	BR	Drilling 32 mm dia hole and upto depth of 400 mm and grounting with epoxy resin of reinforcement steel of 25 mm dia of all manpower and equipments complete in all respect	As directed by Engineer in Charge	Number	4340	1866
692	Bridge Repair New Item	19.26	BR	Re-casting of bracket with micro-concrete and 10 mm aggregate (1:1) with leakproof shuttering all manpower and equipments complete in all respect	As directed by Engineer in Charge	Cubic Meter	94807	15550
693	Bridge Repair New Item	19.27	BR	P/fixing of carbon 100 mm x 1.4 mm carbon laminate with adhesive including of all manpower and equipments complete in all respect	As directed by Engineer in Charge	Running Meter	7028	1866
694	Bridge Repair New Item	19.28	BR	P/Applying prestressing to the laminate with hydraulic system to the required force as per approved design with all manpower and equipments complete in all respect	As directed by Engineer in Charge	Running Meter	7393	2488
695	Bridge Repair New Item	19.29	BR	P/Fixing of carbon fiber sheet of 430 GSM with adhesive including of hanging scofolding of all manpower and equipments complete in all respect	As directed by Engineer in Charge	Square Meter	8986	1866
696	Bridge Repair New Item	19.30	BR	Providing and fixing carbon fiber anchor including drilling hole in the base concrete fixing the anchor using epoxy 50X55 system spreading the anchor fibers in star pattern including appication of saturant etc. complete.	As directed by Engineer in Charge	Number	542	311
697	Bridge Repair New Item	19.31	BR	Anticorrosive treatment to expose reinforcement in two coats with time interval of minimum 4 hours between each coat. The application shall be done by brush.	As directed by Engineer in Charge	Square Meter	571	311

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
698	Bridge Repair New Item	19.32	BR	Carry out application of "Bi-polar migratory corrosion inhibitor" on concrete surface. This inhibitor has migratory kind of property which permits the material to migrate to a virtual extent of 100mm, through pores of concrete, inhibiting the corrosion etc complete.	As directed by Engineer in Charge	Square Meter	750	498
699	Bridge Repair New Item	19.33	BR	Providing & applying structural grade epoxy latex bond coat prior to application of any type of mortar confirming to IS codes or equivalent to ensure bond between old concrete & new concrete by brush application etc complete.	As directed by Engineer in Charge	Square Meter	765	311
700	Bridge Repair New Item	19.34	BR	Providing & applying 2 coats of compatible Polyurethane on epoxy fiber wrapped surface with brush /spray application etc complete.	As directed by Engineer in Charge	Square Meter	796	498
701	Bridge Repair New Item	19.35	BR	Providing & applying 20mm thick single coat Epi-bond plaster on FRP wrap surface & other area etc complete.	As directed by Engineer in Charge	Square Meter	1191	498
702	Bridge Repair New Item	19.36	BR	Providing 10 mm dia and 150 mm long tie rod stud through corrugated GI decking sheet and welding to the deck slab reinforcement for holding decking sheets in place etc complete.	As directed by Engineer in Charge	Number	65	16
703	Bridge Repair New Item	19.37	BR	Dismantling of concrete pedestal up to required height including cutting reinforcement by using of concrete saw, complete including all fixing arrangements of the machines, water for cooling, diamond saw, other accessories, safety of workers and removal and disposal of debris as per instruction of site in- charge etc complete	As directed by Engineer in Charge	Number	18500	2433
704	Bridge Repair New Item	19.38	BR	Dismantling of concrete pedestal up to required height using electrical breakers including cutting reinforcement by gas cutters, other accessories, safety of workers and removal and disposal of debris as per instruction of site in- charge	As directed by Engineer in Charge	Number	4878	2719
705	Bridge Repair New Item	19.39	BR	Providing and applying anticorrosive treatment with epoxy zinc rich primer to the exposed reinforcement after cleaning either with wire brush or sand blasting including all tools, tacks, machinery etc. complete.	As directed by Engineer in Charge	Square Meter	728	493
706	Bridge Repair New Item	19.4	BR	Stone work Joint Filling :Racking of joints in Course rubble masonry (CRM). Sealing of the joints with epoxy mortar confirming to Section 2800 of technical specification, including pointing, finishing ect., complete.	As directed by Engineer in Charge	Number	1372	493
707	Bridge Repair New Item	19.41	BR	Dismantelling existing damaged Drainage Water Spout and providing 100mm diameter GI water spouts as per detailed drawings in RCC slab and wearing surface/kerb etc.complete	As directed by Engineer in Charge	Number	3118	1972
708	Bridge Repair New Item	19.42	BR	Providing and fixing additional reinforcement to replace the corroded diameter of existing steel for strengthening purpose.	As directed by Engineer in Charge	Number	85	8

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
709	Bridge Repair New Item	19.43	BR	Raising of folding to reach the entire surface area of bridge. upto 10 m height above ground level, made with MS tube, horizontal and vertical tub joint with cup and lock system with MS tubes, challies, MS clamp and maintaining it in a serviceable condition for execution work of cleaning and/ or pointing and or/ applying protection coating and/ inspection of work at required locations and removing it there after etc complete. (Item includes making of temporary support for scaffolding, cost of scaffolding, labour, material, safety devices, etc., all complete)	As directed by Engineer in Charge	Square Meter	681	148
710	Bridge Repair New Item	19.44	BR	Structural Repairs to damaged concrete surface with polymer concrete /mortar with AC-ACRYLATE-REPAIR and AC-BOND-AID as detailed in the method statement including material, labour, etc., all complete as directed by engineer. (Repairs to deck slab, piers, abutment, girders and other locations up to 40 mm thickness).	As directed by Engineer in Charge	Square Meter	3833	592
711	Bridge Repair New Item	19.45	BR	Core Strengthening of Concrete Structure: Strengthening of concrete structure including grouting of concrete with epoxy, AC-DUR-IE, as detailed in the method statement. Item includes cost of material, labour, equipment's and also removal of nozzles and finishing of the surface after the work.	As directed by Engineer in Charge	Number	4070	986
712	Bridge Repair New Item	19.46	BR	Erecting supports for placing the jacks, props and necessary steel structure. Placing of the jacks below bearings. (as per the design of lifting scheme). The lifting scheme shall be put up to the approval of consultants after approval of the work shall be done by competent authority. Cost of the bearings, design of erection system, jacks, platforms, safety devices, etc., complete including releasing of bridge span on the new bearings. (Bearing replacement from 50 to 100 numbers per bridge)	As directed by Engineer in Charge	Number	32845	4395

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2020-21 BUILDING WORKS								
713	Excavation	21.01	BDA 1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 3.00 m.) By Manual Means	Bd.A.1 Page Number 259	Cubic Metre	217.00	217.00
714	Excavation	21.02	BDA 1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means	Bd.A.1 Page Number 259	Cubic Metre	182.00	105.00
715	Excavation	21.03	BDA 1	Excavation for foundation in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5m to 3.0m) By Manual Means	Bd.A.1 Page Number 259	Cubic Metre	286.00	286.00
716	Excavation	21.04	BDA 1	Excavation for foundation in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5m to 3.0m) By Mechanical Means	Bd.A.1 Page Number 259	Cubic Metre	227.00	132.00
717	Excavation	21.05	BDA 2	Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Manual Means	Bd.A.1 Page No.259	Cubic Metre	331.00	331.00
718	Excavation	21.06	BDA 2	Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means	Bd.A.2 Page Number 259	Cubic Metre	200.00	115.00
719	Excavation	21.07	BDA 2	Excavation for foundation in hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m) By Manual Means	Bd.A.1 Page No.259	Cubic Metre	376.00	376.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
720	Excavation	21.08	BDA 2	Excavation for foundation in Hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m.) By Mechanical Means	Bd.A.2 Page Number 259	Cubic Metre	250.00	145.00
721	Excavation	21.10	BDA 3	Excavation for foundation in hard murum and boulders including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m.) By Mechanical Means	Bd.A.3 Page Number 259	Cubic Metre	221.00	128.00
722	Excavation	21.12	BDA 3	Excavation for foundation in Hard murum and boulders including removing the excavated material upto a distance of 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 m to 3.0 m.) By Mechanical Means	Bd.A.3 Page Number 259	Cubic Metre	274.00	158.00
723	Excavation	21.14	BDA 4	Excavation for foundation in Soft rock and old cement or lime masonry foundations including removing the excavated material upto a distance of 50 metres beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth /murum, ramming, watering including shoring and strutting etc. complete (lift upto 1.5m) By Mechanical Means	Bd.A.4 Page Number 259	Cubic Metre	382.00	264.00
724	Excavation	21.16	BDA 4	Excavation for foundation in Soft rock and old cement or lime masonry foundations including removing the excavated material upto a distance of 50 metres beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming ,watering including shoring and strutting etc. complete. (Lift from 1.5m To 3.0 m.) By Mechanical Means	Bd.A.4 Page Number 259	Cubic Metre	466.00	325.00
725	Excavation	21.17	BDA 5	Excavation for foundation in Hard rock by blasting including trimming and leveling the bed by chiseling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 metres from the building area including dewatering and back filling with available earth/murum, watering, ramming, etc. complete. (Lift upto 1.5m) By Mechanical Means	Bd.A.5 Page Number 259	Cubic Metre	770.00	413.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
726	Excavation	21.18	BDA 5	Excavation for foundation in Hard-rock by blasting including trimming and leveling the bed by chiselling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 metres from the building area including dewatering and back filling with available earth/murum watering, ramming etc. complete. (Lift from 1.5m To 3.0 m) By Mechanical Means	Bd.A.5 Page Number 259	Cubic Metre	915.00	511.00
727	Excavation	21.19	BDA 5 B1	Excavation for foundation in Hard-rock by controlled blasting including trimming and leveling the bed by chiselling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 metres. from the building area including dewatering and back filling with available earth soil /murum watering, ramming etc. complete. (Lift upto 1.5m) By Mechanical Means	Bd.A.5 Page Number 259	Cubic Metre	962.00	425.00
728	Excavation	21.20	BDA 6	Excavation for foundation in Hard rock by chiselling, wedging, line drilling, etc. including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the building area stacking as directed, dewatering and back filling with available earth/ murum watering, ramming etc. complete. (Lift upto 1.5 m). By Mechanical Means	Bd.A.6 Page Number 260	Cubic Metre	1169.00	812.00
729	Excavation	21.21	BDA 7	Excavation for foundation in laterite rock (soft or hard) including trimming and levelling the bed for the foundation, removing the excavated material up to a distance of 50 metres beyond the building area, stacking as directed, dewatering and back filling with available murum, watering, ramming etc. complete. (Lift upto 1.5 m.) By Mechanical Means	Bd.A.7, Page Number 260	Cubic Metre	1309.00	812.00
730	Excavation	21.22	BDW	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) by treating the bottom surface and sides of excavation at the rate of 5 litres of emulsion concentrate of 1.0 percent of chlorophyrifos per square meter of surface area covering 10 years guarantee on bond paper.	As directed by Engineer in charge.	Square Metre	86.00	5.00
731	Excavation	21.23	BDW	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 litres of emulsion concentrate of 1.0 percent of clorophyrifos per square metre of vertical surface area covering 10 years guarantee on bond paper.	As directed by Engineer in charge.	Square Metre	90.00	5.00
732	Excavation	21.24	BDW	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrate at 1.0 percent of clorophyrifos per square metre of surface area covering ten years guarantee on bond paper.	As directed by Engineer in charge.	Square Metre	87.00	7.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
733	Excavation	21.25	BDW	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-I) to the soil along the external face of building by punching holes of 1.2 of 1.5 C.M. diameter about 30 -60 cm deep at 15 cm c/c as close to the wall as possible and to inject 0.5 percent of aldrin or clorophyrifos at the rate of 7.5 litres per hole and sealing the same with proper filling and covering 10 years guarantee on bond paper.	As directed by Engineer in charge.	Square Metre	142.00	22.00
734	Excavation	21.26	BDW	Providing antitermite treatment to the wooden frames of doors/windows of the existing building as per I.S. 6313 (Part-III) by drilling 6mm dia. holes at four corners on one side and four corners on other side at a downward angle of about 45 degree at the junction of wood work and masonry and injecting 150 ml. of chlorodane 5% W.C. and sealing by filling putty etc. complete covering 2 years guarantee on bond paper.	As directed by Engineer in charge.	Number	61.00	9.00
735	Excavation	21.27	BDW	Providing antitermite treatment to the joints of wooden beams/joist used for the roof work of the existing building as per I.S. 6313 (Part-III) by drilling 6mm dia. holes at a downward angle of about 45 degree at the junction of wood work and masonry and injecting 80 ml. of chlorodane 5% W.C. and sealing by filling putty etc. complete covering 2 years guarantee on bond paper.	As directed by Engineer in charge.	Number	48.00	15.00
736	Excavation	21.28	BDW	Providing antitermite treatment to the sides of flooring of the existing building as per I.S. 6313 (Part-III) by punching holes 6mm dia. drilled at a distance of 30cm. centre to centre and injecting one percent of chlorodane emulsion concentrate at the rate of 50 ml per hole and sealing by filling putty etc. complete covering 2 years guarantee on bond paper.	As directed by Engineer in charge.	Number	22.00	9.00
737	Excavation	21.29	BDW	Providing antitermite treatment around the periphery of the existing building as per I.S. 6313 (Part-III) by excavating trenches of 20cm width and exposing the sides of columns and plinth beams upto a depth of 300mm and injecting one percent of chlorodane emulsion concentrate at the rate of 2.25 litres per Running metre and refilling the trenches etc. complete covering 2 years guarantee on bond paper.	As directed by Engineer in charge.	Running Metre	57.00	32.00
738	Excavation	21.30	BDW	Providing general pest control services to the building to control the nuisance of cockroaches, lizards, pin bores and other insects etc. with 4 operations in a year and monthly check up.	As directed by Engineer in charge.	Square Metre	21.00	8.00
739	Excavation	21.31	BDW	Providing general pest control services to small size of inspection chamber to control the nuisance of cockroaches during the year with monthly check up.	As directed by Engineer in charge.	Number	175.00	109.00
740	Excavation	21.32	BDW	Providing general pest control services to big size of inspection chamber to control the nuisance of cockroaches during the year with monthly check up.	As directed by Engineer in charge.	Number	325.00	143.00
741	Excavation	21.33	BDW	Labour charges for removing grass, thorny shrubs, Jungli shrub, Kubabul and alike grass along roadside making the ground clean by showel and phavaras etc. complete.	As directed by Engineer in charge.	Square Metre	7.00	7.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
742	Excavation	21.34	BDW	Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete.	As directed by Engineer in charge.	Square Metre	5.00	5.00
743	Excavation	21.36	BDA 10	Filling in plinth and floors with approved excavated material in 15cm. to 20cm. layers including watering and compacting etc. complete.	Bd.A.10 Page Number 262	Cubic Metre	109.00	109.00
744	Excavation	21.37	BDA 11	Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	Bd.A.11 Page Number 263	Cubic Metre	446.00	116.00
745	Excavation	21.38	BDA 12	Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	Bd.A. 12 Page Number 264	Cubic Metre	1108.00	395.00
746	Excavation	21.39	BDA 13	Providing and filling in the foundation with sand of approved quality including watering, compacting etc. complete. (To be executed with prior approval of Superintending Engineer)	Bd.A.13 Page Number 264	Cubic Metre	2034.00	109.00
747	Excavation	21.40	BDA	Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.	As directed by Engineer in charge.	Cubic Metre	1105.00	399.00
748	Pile Foundation: Building	22.01	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 RCCsingle rim bored pile of 225 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement, compaction of concrete including chipping and dressing including chipping and dressing if required etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	727.00	164.00
749	Pile Foundation: Building	22.02	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete of M20 grade RCC single rim bored pile of 300 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	945.00	251.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
750	Pile Foundation: Building	22.03	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for single rim bored pile of 380 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1201.00	359.00
751	Pile Foundation: Building	22.04	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for single rim bored pile of 450 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1527.00	500.00
752	Pile Foundation: Building	22.05	Bd-B	Providing and laying M-20 RCC cast in situ single rim bored pile of 535 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1947.00	648.00
753	Pile Foundation: Building	22.06	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for single rim bored pile of 600 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2331.00	795.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
754	Pile Foundation: Building	22.07	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for single rim bored pile of 225 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	734.00	164.00
755	Pile Foundation: Building	22.08	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for single rim bored pile of 300 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	963.00	249.00
756	Pile Foundation: Building	22.09	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for single rim bored pile of 380 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1221.00	359.00
757	Pile Foundation: Building	22.10	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for single rim bored pile of 450 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1642.00	500.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
758	Pile Foundation: Building	22.11	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for double rim bored pile of 225 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock,excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	829.00	164.00
759	Pile Foundation: Building	22.12	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for double rim bored pile of 300 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock,excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1202.00	249.00
760	Pile Foundation: Building	22.13	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for double rim bored pile of 380 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock,excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1770.00	359.00
761	Pile Foundation: Building	22.14	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-20 for double rim bored pile of 450 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock,excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2446.00	500.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
762	Pile Foundation: Building	22.15	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for double rim bored pile of 225 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	864.00	164.00
763	Pile Foundation: Building	22.16	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for double rim bored pile of 300 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1277.00	249.00
764	Pile Foundation: Building	22.17	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for double rim bored pile of 380 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	1906.00	359.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
765	Pile Foundation: Building	22.18	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for double rim bored pile of 450 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2674.00	500.00
766	Pile Foundation: Building	22.19	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for double rim bored pile of 535 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3837.00	648.00
767	Pile Foundation: Building	22.20	Bd-B	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for in situ double rim bored pile of 600 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. concrete prepared in reversible drum type concrete mixer by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	4972.00	795.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
768	Pile Foundation: Building	22.21	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 325 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by concrete prepared by tremie arrangement, compaction of concrete including chipping and dressing etc. complete. concrete by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2166.00	1084.00
769	Pile Foundation: Building	22.22	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 350mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2225	1084
770	Pile Foundation: Building	22.23	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 400 mm diameter.or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2359	1084

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
771	Pile Foundation: Building	22.24	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 425mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2430	1084
772	Pile Foundation: Building	22.25	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 475mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	2616	1084
773	Pile Foundation: Building	22.26	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 500mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3009	1265

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
774	Pile Foundation: Building	22.27	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 525 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3188	1265
775	Pile Foundation: Building	22.28	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 550 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3288	1265
776	Pile Foundation: Building	22.29	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 600 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3488	1265

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
777	Pile Foundation: Building	22.30	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 625 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3789	1265
778	Pile Foundation: Building	22.31	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 650 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	3900	1265
779	Pile Foundation: Building	22.32	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 750 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	4488	1265

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
780	Pile Foundation: Building	22.33	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 800 mm diameter. or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	4765	1265
781	Pile Foundation: Building	22.34	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 825 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	5402	1518
782	Pile Foundation: Building	22.35	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 900 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	5849	1518

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
783	Pile Foundation: Building	22.36	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 975 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in-charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	6389	1518
784	Pile Foundation: Building	22.37	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 1000 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in-charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	6511	1518
785	Pile Foundation: Building	22.38	Bd/B-4 P-270	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 1050 mm diameter or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in-charge including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) by tremie arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Running Metre	6868	1518
786	Pile Foundation: Building	22.39	Bd/B-2 P-269	Chiseling through pile shells in hard strata like boulders, soft and hard rocks Upto and inclusive of 550 mm diameter including removing and stacking the loose materials etc. complete and disposing of the unserviceable materials outside complete.	As directed by Engineer in charge	Rig Hour	774.00	774.00
787	Pile Foundation: Building	22.40	Bd/B-2 P-269	Chiseling through pile shells in hard strata like boulders, soft and hard rocks Beyond 550 mm and upto and inclusive of 750 mm dia. including removing and stacking the loose materials etc. complete and disposing of the unserviceable materials outside complete.	As directed by Engineer in charge	Rig Hour	1316.00	1316.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
788	Pile Foundation: Building	22.41	Bd/B-2 P-269	Chiseling through pile shells in hard strata like boulders, soft and hard rocks Beyond 750 mm and upto and inclusive of 900 mm dia including removing and stacking the loose materials etc. complete and disposing of the unserviceable materials outside complete.	As directed by Engineer in charge	Rig Hour	1530.00	1530.00
789	Pile Foundation: Building	22.42	Bd/B-2 P-269	Chiseling through pile shells in hard strata like boulders, soft and hard rocks Beyond 900 mm and upto and inclusive of 1050 mm dia. including removing and stacking the loose materials etc. complete and disposing of the unserviceable materials outside complete.	As directed by Engineer in charge	Rig Hour	1701.00	1701.00
790	Pile Foundation: Building	22.43	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position upto 400 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	98081.00	79066.00
791	Pile Foundation: Building	22.44	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position above 400 mm and upto to 550 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	118544.00	99529.00
792	Pile Foundation: Building	22.45	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position above 550 mm and upto 650 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	162934.00	143919.00
793	Pile Foundation: Building	22.46	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position above 650 mm and upto 750 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	204525.00	185510.00
794	Pile Foundation: Building	22.47	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position above 750 mm and upto 825 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	246170.00	223544.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
795	Pile Foundation: Building	22.48	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position above 825 mm and upto 900 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	285627.00	263001.00
796	Pile Foundation: Building	22.49	Bd/B-8 P-271	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position above 900 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.	As directed by Engineer in charge	Number	355989.00	333363.00
797	Pile Foundation: Building	22.50		Empty boring for 325 to 400 mm dia bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in Charge)	As directed by Engineer in charge	Running Metre	527.00	527.00
798	Pile Foundation: Building	22.51		Empty boring for 425 to 500 mm dia. bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in Charge)	As directed by Engineer in charge	Running Metre	613.00	613.00
799	Pile Foundation: Building	22.52		Empty boring for 525 to 600 mm dia. bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in Charge)	As directed by Engineer in charge	Running Metre	1235.00	1235.00
800	Pile Foundation: Building	22.53		Empty boring for 625 to 700 mm dia. bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in Charge)	As directed by Engineer in charge	Running Metre	1272.00	1272.00
801	Pile Foundation: Building	22.54		Empty boring for 725 to 1050 mm dia. bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in Charge)	As directed by Engineer in charge	Running Metre	1363.00	1363.00
802	Pile Foundation: Building	22.55		Chipping and dressing of the R.C.C. piles upto 0.60 meter including cleaning reinforcement and removal of dismantled materials upto a distance of 50 meter beyond the building area etc. for providing pile caps. Spec :(As directed by Engineer in Charge)	As directed by Engineer in charge	Number	678.00	678.00
803	Pile Foundation: Building	22.56		Providing bentonite slurry process for various diameter of piles vide Item Nos 1 (i to xxiv) above. Spec : (As directed by Engineer in Charge)	As directed by Engineer in charge	Running Metre	70.00	27.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
804	Pile Foundation: Building	22.57		Providing placing and Driving in position 6 millimeter mild steel liner for R.C.C. Piles upto required depth with 12mm thick mild steel cutting edge of 0.50m length at bottom including fabricating cutting the mild steel sheet to required diameter and shape ,welding the joints and driving with the help of required machineries including all materials labours and lifts etc. complete as directed by the Engineer in charge. Upto 3.00 meter deep liner	As directed by Engineer in charge	Metric Tonne	75381.00	19352.00
805	Pile Foundation: Building	22.58		Providing placing and Driving in position 6 millimeter mild steel liner for R.C.C. Piles upto required depth with 12mm thick mild steel cutting edge of 0.50m length at bottom including fabricating cutting the mild steel sheet to required diameter and shape ,welding the joints and driving with the help of required machineries including all materials labours and lifts etc. complete as directed by the Engineer in charge. Spec :(As directed by Engineer in Charge From 3.00 to 9.50 meter deep liner	As directed by Engineer in charge	Metric Tonne	78921.00	22892.00
806	Pile Foundation: Building	22.59		Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap metal for R.C.C. pile caps as per detailed designs and drawings, including bailing out water manually, centering, formwork, laying/ pumping, compacting, finishing and curing etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete.with Crushed sand VSI Grade/V.S.I. quality Artificial Sand, complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Cubic Metre	6573.00	1980.00
807	Pile Foundation: Building	22.60		Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap metal for R.C.C. pile caps as per detailed designs and drawings, including bailing out water manually, centering, formwork, laying/ pumping, compacting, finishing and curing etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete.with Crushed sand VSI Grade/V.S.I. quality Artificial Sand, complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Cubic Metre	6782.00	1980.00
808	Pile Foundation: Building	22.61		Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap metal for R.C.C. pile caps as per detailed designs and drawings, including bailing out water manually, centering, formwork, laying/ pumping, compacting, finishing and curing etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) complete. (Excluding steel reinforcement)	As directed by Engineer in charge	Cubic Metre	6988.00	1980.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
809	Structural Steel Work	23.01	BDC 2	Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.	Bd.C.2 Page Number 275	Metric Tonne	75938.00	14591.00
810	Structural Steel Work	23.02	BDC 3	Providing and fabricating structural steel work in rolled sections, fixed with connecting plates or angle cleats in main and cross beams, hip and jack rafters, purlins connecting to truss members and the like, as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted/ bolted/ welded connections and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.	Bd.C.3 Page Number 275	Metric Tonne	72436.00	13324.00
811	Structural Steel Work	23.03	BDC 6	Providing structural steel work in single stanchions composed of R.S.J. Channel etc. with caps, bases, mild steel plated, angle brackets, cleats, gusset plates, anchor bolts etc. as per detailed designs and drawings or as directed including cutting, fabrication, hoisting, erecting fixing in position, making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it two. coats of oil painting approved quality and shade etc. complete.	Bd.C.6 Page Number 277	Metric Tonne	72079.00	12982.00
812	Structural Steel Work	23.04	BDC 8	Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.	Bd.C.8 Page Number 278	Metric Tonne	91824.00	30955.00
813	Structural Steel Work	23.05	BDC	Providing and fixing 50 mm. dia. medium class G.I.pipe gate with wicket gate of approved drawing with all fixtures and fittings in two leaves with strong hold fast embedded in c.c. block at top and bottom with locking arrangement including cutting, bending, making holes and with one coat of primer etc. complete.	As directed by Engineer in charge.	Square Metre	6391.00	3568.00
814	Structural Steel Work	23.06	BDC	Providing and erecting structural steel for sakav with all bracing gusset plates etc. as per detailed design and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted/ bolted/welded connection and oil painting with 2 coats of approved quality and shade etc. complete. complete.	As directed by Engineer in charge.	Metric Tonne	96791.00	34621.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
815	Structural Steel Work	23.07	BDC	Providing, fabricating and erecting at site of work the tubular steel structure (shed) as per standard design and specifications having various spans in between trusses and in multiples of standard length of bays as specified as per standard specifications, inclusive of cost of steel tubular trusses, tubular columns purlins, tie runners, foundation bolts, base plates, nuts and bolts, welding wherever required etc. as per detailed drawing inclusive of one coat of anticorrosive paint and two coats of oil painting of approved quality and shade etc. complete. Spec. Number : As directed by Engineer-in-charge.	B-18 Page Number 78	Metric Tonne	85349.00	20728.00
816	Structural Steel Work	23.08	BDC	Providing Gas or Electrical welding for structural steel section, plates as per detailed drawing. For less than 10 mm thick section.	B.18, Page No 78	Centimetre	10.00	7.00
817	Structural Steel Work	23.09	BDW 6A	Providing and fixing mild steel grill gate as per the detailed drawing including hinges, locking arrangements and painting in three coats of oil paint of approved colour and shade etc. complete.(weight 18 Kilogram. to 20 Kilogram. Per Sq.m.) Spec.Number: As directed by Engineer- in-charge.	Spec. Number As directed byEngineer in Charge.	Square Metre	1917.00	244.00
818	Structural Steel Work	23.11		Providing structural steel work of rectangular hollow steel section for steel trusses, other similar trussed items like purlin and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted/bolted/ welded connections and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade complete. Spec. Number : As directed by Engineer-in-charge.	Spec. Number As directed byEngineer in Charge.	Metric Tonne	92550.00	20728.00
819	Structural Steel Work	23.12		Providing structural steel work in hollow section of various thickness and sizes in square, rectangular and round shape from 25mm to 450mm section as per IS 4923 YST 310 Grade produced from iron ore and blast furnace route etc. as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted/bolted/ welded connections and painting complete.	Spec. Number As directed byEngineer in Charge.	Metric Tonne	97527.00	20728.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
820	Plain Cement Concrete	24.01	BDE 1	Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. E. 1 Page Number 287	Cubic Metre	5449.00	1322.00
821	Plain Cement Concrete	24.04	BDE 2	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E.2 Page Number 288 and B.7 Page No 38	Cubic Metre	5874.00	1322.00
822	Plain Cement Concrete	24.06	BDE 2	Providing and laying Cast in situ/Ready Mix cement concrete in M20 of trap/ granite/quartzite/gneiss metal for steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E.2 Page Number 288 and B.7 Page No 38	Cubic Metre	6181.00	1322.00
823	Plain Cement Concrete	24.08	BDE 4	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E.4 Page Number 289 and B-7, Page Number 38	Cubic Metre	5936.00	1322.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
824	Plain Cement Concrete	24.10	BDE 4	Providing and laying Cast in situ/Ready Mix cement concrete in M20 of trap/ granite/quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E.4 Page Number 289 and B-7, Page Number38	Cubic Metre	6181.00	1322.00
825	Plain Cement Concrete	24.12	BDE 7	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / granite /quartzite/ gneiss metal for arches including skew backs as per detailed drawing or as directed in superstructure including steel centering, formwork, compacting, finishing with minimum thickness of 1:3 cement plaster to give a smooth and even surface or roughening them if special finish is to be provided and curing and finishing if required complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer. complete, . With fine aggregate (Crushed sand VSI Grade)	Bd.E.7 Page No 291 and B-7 Page No .38	Cubic Metre	10415.00	3134.00
826	Plain Cement Concrete	24.14	BDE 5	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for plain or molded sills, cornice, jambs, block in course, or architraves of required size and shapes including steel centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided,finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E. 5/Page Number 290/I.S. 456 (2000)	Cubic Metre	5936.00	1322.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
827	Plain Cement Concrete	24.15	BDE 5	Providing and laying Cast in situ/Ready Mix cement concrete in M20 of trap/ granite/quartzite/gneiss metal for plain or molded sills, cornice, jambs, block in course, or architraves of required size and shapes including steel centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided,finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer etc. complete, With fine aggregate (Crushed sand VSI Grade)	Bd.E. 5/Page Number 290/I.S. 456 (2000)	Cubic Metre	6181.00	1322.00
828	Plain Cement Concrete	24.16	BDE 3	Providing and laying Cast in situ/Ready Mix cement concrete M-15 of trap/ granite/quartzite/gneiss metal for coping to plinth or parapet, moulded or chamfered as per drawing or as directed including steel centering, plywood/ steel formwork compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.) With fine aggregate (Crushed sand VSI Grade)	Bd.E. 3/Page Number 288/I.S. 456 (2000)	Cubic Metre	5845.00	1322.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
829	Reinforced Cement Concrete	25.11	BDF 3	Providing and laying in situ /Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying/pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.3 Page Number 298 and B.7, Page Number38	Cubic Metre	6440.00	1923.00
830	Reinforced Cement Concrete	25.13	BDF 3	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering, formwork ,cover blocks, laying/pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.3 Page Number 298 and B.7, Page Number38	Cubic Metre	6608.00	1923.00
831	Reinforced Cement Concrete	25.15	BDF 3	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. columns as per detailed designs and drawing or as directed including Steel centering formwork, cover blocks laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.3 Page Number 298 and B.7, Page Number38	Cubic Metre	6776.00	1923.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
832	Reinforced Cement Concrete	25.17	BDF 3	Providing and laying Cast in situ/Ready Mix cement concrete M-35 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. columns as per detailed designs and drawing or as directed including Steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.3 Page Number 298 and B.7, Page Number38	Cubic Metre	6860.00	1923.00
833	Reinforced Cement Concrete	25.19	BDF 3	Providing and laying Cast in situ/Ready Mix cement concrete M-40 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.3 Page Number 298 and B.7, Page Number38	Cubic Metre	6944.00	1923.00
834	Reinforced Cement Concrete	25.31	BDF 5	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.5 Page Number 300 and B.7, Page.Number 38	Cubic Metre	12528.00	4788.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
835	Reinforced Cement Concrete	25.33	BDF 5	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.5 Page Number 300 and B-7,Page No 38.	Cubic Metre	12696.00	4788.00
836	Reinforced Cement Concrete	25.35	BDF 5	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork,cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.5 Page Number 300 and B.7, Page.Number 38	Cubic Metre	12864.00	4788.00
837	Reinforced Cement Concrete	25.37	BDF 5	Providing and laying Cast in situ/Ready Mix cement concrete M-35 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC without SCAD Aenabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.5 Page Number 300 and B.7, Page.Number 38	Cubic Metre	12948.00	4788.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
838	Reinforced Cement Concrete	25.39	BDF 5	Providing and laying Cast in situ/Ready Mix cement concrete M-40 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.5 Page Number 300 and B.7, Page.Number 38	Cubic Metre	13032.00	4788.00
839	Reinforced Cement Concrete	25.50	BDF 6	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6 Page Number 300 and B.7, Page Number38	Cubic Metre	11104.00	4620.00
840	Reinforced Cement Concrete	25.52	BDF 6	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6 Page Number 300 and B.7, Page Number38	Cubic Metre	11272.00	4620.00
841	Reinforced Cement Concrete	25.54	BDF 6	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6 Page Number 300 and B.7, Page Number38	Cubic Metre	11440.00	4620.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
842	Reinforced Cement Concrete	25.56	BDF 6	Providing and laying Cast in situ/Ready Mix cement concrete M-35 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6 Page Number 300 and B.7, Page Number38	Cubic Metre	11524.00	4620.00
843	Reinforced Cement Concrete	25.58	BDF 6	Providing and laying Cast in situ/Ready Mix cement concrete M-40 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6 Page Number 300 and B.7, Page Number38	Cubic Metre	11608.00	4620.00
844	Reinforced Cement Concrete	25.70	BDF 8	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 302 and B.7, Page Number38	Cubic Metre	12449.00	5375.00
845	Reinforced Cement Concrete	25.72	BDF 8	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 302 and B.7, Page Number38	Cubic Metre	12617.00	5375.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
846	Reinforced Cement Concrete	25.74	BDF 8	Providing and laying Cast in situ/Ready Mix cement concrete M-30 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 302 and B.7, Page Number38	Cubic Metre	12785.00	5375.00
847	Reinforced Cement Concrete	25.76	BDF 8	Providing and laying Cast in situ/Ready Mix cement concrete M-35 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 302 and B.7, Page Number38	Cubic Metre	12869.00	5375.00
848	Reinforced Cement Concrete	25.78	BDF 8	Providing and laying Cast in situ/Ready Mix cement concrete M-40 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 302 and B.7, Page Number38	Cubic Metre	12953.00	5375.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
849	Reinforced Cement Concrete	26.05	BDF 9	Providing and laying Cast in situ/Ready Mixcement concrete M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.9 Page Number 303 and B.7, Page Number38	Cubic Metre	12449.00	5375.00
850	Reinforced Cement Concrete	26.07	BDF 9	Providing and laying Cast in situ/Ready Mixcement concrete M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.9 Page Number 303 and B.7, Page Number38	Cubic Metre	12617.00	5375.00
851	Reinforced Cement Concrete	26.09	BDF10	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite / quartzite / gneiss metal for R.C.C. canopy as per detailed designs and drawings including steel centering, formwork, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing etc. complete (excluding reinforcement), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 303 and B.7, Page Number38	Cubic Metre	12449.00	5375.00
852	Reinforced Cement Concrete	26.11	BDF10	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite / quartzite / gneiss metal for R.C.C. canopy as per detailed designs and drawings including steel centering, formwork, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing etc. complete (excluding reinforcement). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 Page Number 303 and B.7, Page Number38	Cubic Metre	12617.00	5375.00
853	Reinforced Cement Concrete	26.17	BDF 11	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying/pumping, compacting , curing , finishing and rougheningthem if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.11 Page Number 304 and B.7, Page Number 38	Cubic Metre	14160.00	6697.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
854	Reinforced Cement Concrete	26.19	BDF 11	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.11 Page Number 304 and B.7, Page Number 38	Cubic Metre	14328.00	6697.00
855	Reinforced Cement Concrete	26.23	BDF 12	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 12 Page Number 304 and B-7, Pg 38	Cubic Metre	6519.00	2002.00
856	Reinforced Cement Concrete	26.25	BDF 13A	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / quartzite /granite /gneiss metal for R.C.C. Waist slab, and steps of staircases as per detailed design and drawings or as directed including steel centering, formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding einforcement, including cover block).(Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 13 Page Number 305 /I.S. 456 (2000	Cubic Metre	13137.00	5652.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
857	Reinforced Cement Concrete	26.26	BDF 13A	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap / quartzite /granite /gneiss metal for R.C.C. Waist slab, and steps of staircases as per detailed design and drawings or as directed including steel centering, plywood/ steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding einforcement, including cover block).(Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 13 Page Number 305 /I.S. 456 (2000	Cubic Metre	13360.00	5652.00
858	Reinforced Cement Concrete	26.27	BDF 14A	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / quartzite /granite /gneiss metal for R.C.C.newel posts of staircase as per detailed design and drawings including steel centering, plywood / steel formwork, steel props, laying / pumping, compaction, finishing uneven and honeycombed surface with C.M.1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block). (Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 14 Page Number 305 /I.S. 456 (2001	Cubic Metre	11418.00	4345.00
859	Reinforced Cement Concrete	26.28	BDF 14A	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap / quartzite /granite /gneiss metal for R.C.C.newel posts of staircase as per detailed design and drawings including steel centering, plywood / steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M.1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block). (Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 14 Page Number 305 /I.S. 456 (2002	Cubic Metre	11586.00	4345.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
860	Reinforced Cement Concrete	26.29	BDF 15A	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap /granite / gneiss/ quartzite metal for R.C.C. arches with skew backs as per detailed design and drawings or as directed including steel centering, plywood/steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block). Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 15 Page Number 306 /I.S. 456 (2003)	Cubic Metre	12575.00	4807.00
861	Reinforced Cement Concrete	26.30	BDF 15A	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap /granite / gneiss/ quartzite metal for R.C.C. arches with skew backs as per detailed design and drawings or as directed including steel centering, plywood/steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block). Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed) With fine aggregate (Crushed sand VSI Grade)	Bd. F. 15 Page Number 306 /I.S. 456 (2003)	Cubic Metre	12743.00	4988.00
862	Reinforced Cement Concrete	26.31	BDF 16	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / granite /gneiss / quartzite metal for R.C.C. fins of required thickness in position as shown on the drawings or as directed by Engineer-in-charge including steel centering, plywood / steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block) Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 16 Page Number 306 /I.S. 456 (2004)	Cubic Metre	13081.00	4541.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
863	Reinforced Cement Concrete	26.32	BDF 16	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap / granite /gneiss / quartzite metal for R.C.C. fins of required thickness in position as shown on the drawings or as directed by Engineer-in-charge including steel centering, plywood / steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block) Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 16 Page Number 306 /I.S. 456 (2004	Cubic Metre	13249.00	4541.00
864	Reinforced Cement Concrete	26.33	BDF 17	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	Bd.F.17, Page Number 306	Metric Tonne	65117.00	10583.00
865	Reinforced Cement Concrete	26.34	BDF 17	Providing and fixing in position HCRM / CRS (Corrosion Resistant Steel) bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	Bd.F.17, Page Number 306	Metric Tonne	70072.00	10583.00
866	Reinforced Cement Concrete	26.36		Providing and applying Anti corrosive treatment to reinforcement as per cement polymer composite coating (C.P.C.C.) method developed by C.E.C.R.I. including cleaning the bar by means of any established mechanical or manual method for removing rust and deleterious material, applying rapid setting primer and cement polymer sealing coat of approved and licensed by CECRI including redoing the process if damage occurs during handling, stacking etc. complete. (With prior approval of SE)	As directed by Engineer in Charge	Metric Tonne	10122.00	5879.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST		
867	Reinforced Cement Concrete	26.37	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 8mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant, including cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. FREQUENCY OF TEST OF FUSION BONDED EPOXY COAT a) Coating thickness shall be tested at a frequency of not less than one full length bar every twenty bars for each size b) continuity of coating shall be determined by testing one full length bar in every twenty bars for each size c) Coating thickness over the whole of the coated bar section shall be determined by sectioning and examining one bar in every twenty tonnes for each size. d) For testing adhesion of coating, samples shall be selected from each size according to the frequency given below: <table><tr><td>Nominal Size of Bar, MM</td><td>Number of Samples</td></tr></table> For all types of bar : Minimum 1 for every diameter or as directed by engineer in charge	Nominal Size of Bar, MM	Number of Samples	As directed by Engineer in Charge	Metric Tonne	19328.00	941.00
Nominal Size of Bar, MM	Number of Samples									

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
868	Reinforced Cement Concrete	26.38	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 10mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant, including cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. FREQUENCY OF TEST OF FUSION BONDED EPOXY COAT a) Coating thickness shall be tested at a frequency of not less than one full length bar every twenty bars for each size b) continuity of coating shall be determined by testing one full length bar in every twenty bars for each size c) Coating thickness over the whole of the coated bar section shall be determined by sectioning and examining one bar in every twenty tonnes for each size. d) For testing adhesion of coating, samples shall be selected from each size according to the frequency given below: For all types of bar : Minimum 1 for every diameter or as directed by engineer in charge	As directed by Engineer in Charge	Metric Tonne	15420.00	941.00
869	Reinforced Cement Concrete	26.39	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 12mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant, including cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. FREQUENCY OF TEST OF FUSION BONDED EPOXY COAT a) Coating thickness shall be tested at a frequency of not less than one full length bar every twenty bars for each size b) continuity of coating shall be determined by testing one full length bar in every twenty bars for each size c) Coating thickness over the whole of the coated bar section shall be determined by sectioning and examining one bar in every twenty tonnes for each size. d) For testing adhesion of coating, samples shall be selected from each size according to the frequency given below: For all types of bar : Minimum 1 for every diameter or as directed by engineer in charge	As directed by Engineer in Charge	Metric Tonne	13305.00	941.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
870	Reinforced Cement Concrete	26.40	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 16mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant, including cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. FREQUENCY OF TEST OF FUSION BONDED EPOXY COAT a) Coating thickness shall be tested at a frequency of not less than one full length bar every twenty bars for each size b) continuity of coating shall be determined by testing one full length bar in every twenty bars for each size c) Coating thickness over the whole of the coated bar section shall be determined by sectioning and examining one bar in every twenty tonnes for each size. d) For testing adhesion of coating, samples shall be selected from each size according to the frequency given below: For all types of bar : Minimum 1 for every diameter or as directed by engineer in charge	As directed by Engineer in Charge	Metric Tonne	10385.00	941.00
871	Reinforced Cement Concrete	26.41	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 20mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant, including cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. FREQUENCY OF TEST OF FUSION BONDED EPOXY COAT a) Coating thickness shall be tested at a frequency of not less than one full length bar every twenty bars for each size b) continuity of coating shall be determined by testing one full length bar in every twenty bars for each size c) Coating thickness over the whole of the coated bar section shall be determined by sectioning and examining one bar in every twenty tonnes for each size. d) For testing adhesion of coating, samples shall be selected from each size according to the frequency given below: For all types of bar : Minimum 1 for every diameter or as directed by engineer in charge	As directed by Engineer in Charge	Metric Tonne	8638.00	941.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
872	Reinforced Cement Concrete	26.42	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 25mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant extra cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. charge	As directed by Engineer in Charge	Metric Tonne	7258.00	941.00
873	Reinforced Cement Concrete	26.44	MORT and H 1600 Edition 2001.	Providing Fusion Bonded Epoxy Coating (FBEC) to reinforced bars of 32mm diameter as per IS: 13620-1993 specifications for a thickness of 175micron Permissible variation of 50 micron including testing of coating at plant extra cost for careful handling using PVC coating, binding wires instead of G. I. wires to and from Plant) touching up the material supplied repair work etc complete as per detailed specifications. (Lead 200km from plant) etc complete. (Item shall be used for new structures.) Note : The item should be executed with prior approval of Superintending Engineer. FREQUENCY OF TEST OF FUSION BONDED EPOXY COAT a) Coating thickness shall be tested at a frequency of not less than one full length bar every twenty bars for each size b) continuity of coating shall be determined by testing one full length bar in every twenty bars for each size c) Coating thickness over the whole of the coated bar section shall be determined by sectioning and examining one bar in every twenty tonnes for each size. d) For testing adhesion of coating, samples shall be selected from each size according to the frequency given below: For all types of bar : Minimum 1 for every diameter or as directed by engineer in charge	As directed by Engineer in Charge	Metric Tonne	5994.00	941.00
874	Reinforced Cement Concrete	26.46	BDF 20	Providing and fixing in position after hoisting, precast 1:2 cement mortar reinforced jali 50 mm thick with 3 mm diameter mild steel bar reinforcement, of approved design on both side, fixing in cement mortar 1:3 and curing etc. complete	Bd. F. 20 Page Number 307	Square Metre	846.00	144.00
875	Reinforced Cement Concrete	26.47	BDF 20	Providing and fixing in position after hoisting, precast 1:2 cement mortar reinforced jali 80 mm thick with 3 mm diameter mild steel bar reinforcement, of approved design on both sides, fixing in cement mortar 1:3 and curing etc .complete.	Bd. F. 20 Page Number 308	Square Metre	1143.00	144.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
876	Reinforced Cement Concrete	26.58	BDF 41	Providing and laying Cast in situ/Ready Mix C.C. M-20 of trap metal for RCC rectangular grid beam with slab as per detailed design and drawing, steel centering, formwork, cover blocks, laying/pumping, compacting, curing, finishing and roughening them to form surface with C.M. 1:3 of sufficient minimum thickness to give smooth and even surface or roughening them if special finish is to be provided and curing complete (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6, Page Number300 / Bd.F.8, Page Number302 and B.7 Page Number 38.	Cubic Metre	13511.00	5512.00
877	Reinforced Cement Concrete	26.60	BDF 41	Providing and laying Cast in situ/Ready Mix C.C. M-25 of trap metal for RCC rectangular grid beam with slab as per detailed design and drawing or as directed including dewatering if necessary, steel centering, formwork, cover blocks, laying/pumping, compacting, finishing the form surface with C.M. 1:3 of sufficient minimum thickness to give smooth and even surface or roughening them if special finish is to be provided and curing complete (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6, Page Number300 / Bd.F.8, Page Number302 and B.7 Page Number 38.	Cubic Metre	13679.00	5512.00
878	Reinforced Cement Concrete	26.62	BDF 41	Providing and laying Cast in situ/Ready Mix C.C. M-30 of trap metal for RCC rectangular grid beam with slab as per detailed design and drawing or as directed including dewatering if necessary, steel centering, formwork, cover blocks, laying/pumping, compacting, curing, finishing and roughening them to form surface with C.M. 1:3 of sufficient minimum thickness to give smooth and even surface or roughening them if special finish is to be provided and curing complete (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant (pan mixer). With fine aggregate (Crushed sand VSI Grade)	Bd.F.6, Page Number300 / Bd.F.8, Page Number302 and B.7 Page Number 38.	Cubic Metre	13847.00	5512.00
879	Reinforced Cement Concrete	26.64	BDF	Providing and laying Cast in situ/Ready Mix C.C. M-35 of trap metal for RCC rectangular grid beam with slab as per detailed design and drawing or as directed including dewatering if necessary, steel centering, formwork, cover blocks, laying/pumping, compacting, finishing the form surface with C.M. 1:3 of sufficient minimum thickness to give smooth and even surface or roughening them if special finish is to be provided and curing complete (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E.2 Page Number 288 and B.7 Page No 38	Cubic Metre	13931.00	5512.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
880	Reinforced Cement Concrete	26.66	BDF 41	Providing and laying Cast in situ/Ready Mix C.C. M-40 of trap metal for RCC rectangular grid beam with slab as per detailed design and drawing or as directed including dewatering if necessary, steel centering, formwork, cover blocks, laying/pumping, compacting, finishing the form surface with C.M. 1:3 of sufficient minimum thickness to give smooth and even surface or roughening them if special finish is to be provided and curing complete (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E.4 Page Number 289 and B-7, Page Number 38	Cubic Metre	14015.00	5512.00
881	Reinforced Cement Concrete	26.68	BDF	Providing and fixing during laying in RCC Slab rectangular 2 mm thick M.S. sheet fan hook box of size 180x100 mm with required depth with holes or notches as required, bottom and top sides of 1.6 mm M.S. sheet fixed with 3.5 mm dia. round headed screws together with 12 mm dia. M.S. bar bent to shape with hooked ends for fan hook and painting to exposed surface	As directed by Engineer in charge	Number	394.00	27.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
882	Brick Masonry	27.01	BDG 1	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually , striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete.	Bd.G. 1 Page Number 313	Cubic Metre	6663.00	1452.00
883	Brick Masonry	27.02	BDG 2	Providing first class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in plinth including bailing out water manually, striking joints on unexposed faces, pointing with cement mortar 1:3 on exposed face and watering etc. Complete.	Bd.G.2 Page Number 313	Cubic Metre	6551.00	1589.00
884	Brick Masonry	27.03	BDG 3	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in plinth as backing in composite masonry including bailing out water manually, striking joints, raking out joints and watering etc Complete.	Bd.G.3 Page Number 314	Cubic Metre	6444.00	1233.00
885	Brick Masonry	27.05	BDG 5	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete	Bd.G.5 Page Number 315	Cubic Metre	6874.00	1559.00
886	Brick Masonry	27.06	BDG 7	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:4 in half brick thick wall including mild steel longitudinal reinforcement of 2 bars of 6 mm diameter / 2 hoop iron strips 25 mm X 1.6 mm placed at every third course, properly bent and bonded at ends scaffolding, racking out joints and watering etc. complete.	Bd.G.7 Page Number 316	Square Metre	926.00	186.00
887	Brick Masonry	27.07	BDG 8	Providing Burnt Brick-on-edge masonry with second class bricks of conventional type bricks in cement mortar 1:3 including mild steel longitudinal reinforcement of 2 bars of 6mm diameter / one strips of hoop iron 25 mm X 1.6 mm placed at every third course, properly bent and bonded at ends, scaffolding, raking out joints and watering etc .complete.	Bd.G.8 Page Number 317	Square Metre	677.00	162.00
888	Brick Masonry	27.08	BDG 9	Providing first class Burnt Brick masonry with conventional / I.S. type bricks in cement mortar 1:4 including scaffolding, racking out joints pointing in C.M. 1:3 and watering in pillars of rectangular or square shape as shown on the drawing or as directed etc.complete.	Bd.G.9 (a) Page Number 317	Cubic Metre	7407.00	2472.00
889	Brick Masonry	27.09	BDG 9	Providing first class Brick masonry with conventional / IS. type bricks in cement mortar 1:4 including scaffolding, racking out joints pointing in C.M 1:3 and watering etc. in pillars of curved shapes, as shown on the drawing or as directed etc. complete.	Bd.G.9 (b) Page Number 317	Cubic Metre	8648.00	2658.00
890	Brick Masonry	27.10	BDG 10	Providing second class Burnt Brick masonry with conventional / I.S. type bricks in cement mortar 1:4 including scaffolding, racking out joints and watering etc. in pillar of rectangular shapes as shown in the drawings or as directed complete.	Bd.G.10 (a) Page Number 318	Cubic Metre	7324.00	1798.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
891	Brick Masonry	27.11	BDG 10	Providing second class Burnt Brick masonry with conventional / I.S. type bricks in cement mortar 1:4 including scaffolding, racking out joints and watering etc.in pillar of curved shapes as shown in the drawing or as directed complete.	Bd.G.10 (b) Page Number 318	Cubic Metre	8718.00	1960.00
892	Brick Masonry	27.12	BDG	Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. complete.	As directed by engineer in charge and BDG-2 and 5	Cubic Metre	6082.00	1452.00
893	Brick Masonry	27.13	BDG	Providing fly ash brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete	As directed by engineer incharge and BDG- 2 and 5	Cubic Metre	6305.00	1582.00
894	Brick Masonry	27.14	BDG	Providing Second class fly ash brick masonry with conventional / I.S. type bricks in cement mortar 1:4 in half brick thick wall including mild steel longitudinal reinforcement of two bars of 6 mm diameter / two hoop iron strips 25 mm x 1.60 mm at every third course, properly bent and bounded at ends scaffolding raking out joints and watering etc. complete.	Bd. G. 7 Page 316	Square Metre	926.00	186.00
895	Brick Masonry	27.15	BDG	Providing Autoclaved Aerated Concrete Block masonry of Ecolite or equivalent make conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in superstructure including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972)	As directed by engineer in charge	Cubic Metre	6637.00	1900.00
896	Brick Masonry	27.16	BDG	Providing Autoclaved Aerated Concrete Block masonry of Ecolite or equivalent make conforming to IS:2185 (Part 3) - 1984 in extra fine jointing mortar of fixoblock of UltraTech or equivalent in Half brick thick wall including striking joints, raking out joints and scaffolding etc. Complete. (The test shall be carried out conforming to IS:6441 (Part I) - 1972)	As directed by engineer in charge	Square Metre	934.00	157.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
897	Stone Masonry	28.01	BDH 1	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete.	Bd.H.1 Page Number 329	Cubic Metre	4423.00	2295.00
898	Stone Masonry	28.02	BDH 2	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:5 in basements including scaffolding, bailing out water manually, racking out joints when plastering is to be done striking joints where no pointing or plastering is to be done and watering etc.complete.	Bd.H.2 Page Number 329	Cubic Metre	4544.00	2295.00
899	Stone Masonry	28.03	BDH 3	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stone in cement mortar 1:3 in basement with patent water proofing compound added to it at rate of 1Kilogramper bag of cement including bailing out water manually, scaffolding racking out joints when plastering is to be done and watering etc. complete.	Bd.H.3 Page Number 331	Cubic Metre	4775.00	1933.00
900	Stone Masonry	28.04	BDH 4	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including racking out joints when plastering is to be done / striking joints when no plastering is to be done on inside watering and scaffolding etc.complete.	Bd.H.4 Page Number 331	Cubic Metre	4889.00	2761.00
901	Stone Masonry	28.05	BDH 5	Providing random rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in plinth including bailing out water manually , striking joints on unexposed faces. (Excluding pointing) etc.complete.	Bd.H.5 Page Number 331	Cubic Metre	4157.00	2364.00
902	Stone Masonry	28.06	BDH 6	Providing random rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure racking out joints when plastering is to be done / striking joints when no pointing or plastering is to be done on the inside watering and scaffolding etc.complete.	Bd.H.6 Page Number 332	Cubic Metre	4786.00	2631.00
903	Stone Masonry	28.07	BDH 7	Providing random rubble masonry first sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external walls of plinth including bailing out water manually , racking out joints when pointing is to be done and striking joints from inside including watering etc.complete.	Bd.H.7 Page Number 332	Cubic Metre	5264.00	3109.00
904	Stone Masonry	28.08	BDH 8	Providing random rubble masonry first sort of trap /granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including bailing out water manually ,raking out joints from outside and striking joints when no pointing or plastering is to be done from inside watering and scaffolding etc.complete.	Bd.H.8 Page Number 332	Cubic Metre	5579.00	3402.00
905	Stone Masonry	28.09	BDH 11	Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external walls of plinth including bailing out water manually , striking joints inside and raking out joints from outside and watering etc.complete	Bd. H.11 Page Number 333	Cubic Metre	10199.00	2939.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
906	Stone Masonry	28.10	BDH 12	Providing coursed rubble masonry second sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including raking out joints when plastering is to be done and striking joints when no plastering is to be done on the inside, watering scaffolding etc.complete.	Bd.H.12 Page Number 333	Cubic Metre	10742.00	3410.00
907	Stone Masonry	28.11	BDH 13	Providing coursed rubble masonry first sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in external work of plinth including bailing out water manually, striking joints inside and watering etc.complete.	Bd.H.13 Page Number 333	Cubic Metre	10860.00	3600.00
908	Stone Masonry	28.12	BDH 14	Providing coursed rubble masonry first sort of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in superstructure including racking out joints on the inside when plastering is to be done, watering and scaffolding etc. complete.	Bd.H.14 Page Number 333	Cubic Metre	11610.00	3987.00
909	Stone Masonry	28.13	BDH 40	Providing coursed rubble masonry first sort for pillars of trap / granite / quartzite / gneiss stones in cement mortar 1:6 including pointing with cement mortar 1:3 scaffolding and watering etc.complete.	Bd.H.40 Page Number 345	Cubic Metre	11113.00	5285.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
910	Concrete Block Masonry	29.01	BDI 1	Providing and laying masonry of I.S. Standard C.C. hollow block 100 x 200 x 400 mm with 100mm thick in cement mortar 1:6 proportion for superstructure including curing, scaffolding etc. complete.	Bd.I.1 Page Number 349	Square Metre	1116.00	509.00
911	Concrete Block Masonry	29.02	BDI 1	Providing and laying masonry of I.S. Standard C.C. hollow block 200 x 200 x 400 with 200mm thick mm in cement mortar 1:6 proportion for superstructure including curing, scaffolding etc. complete.	Bd.I.1 Page Number 349	Square Metre	1209.00	531.00
912	Concrete Block Masonry	29.03	BDI	Providing and constructing masonry in precast solid Concrete Block (Grade D-50 As per I.S. 2185, Part-I, 1974, Reframed 1987) having compressive strength 5-00 N/mm ² of size (300 mm x 200 mm x 150mm) in cement mortar 1:6 for superstructure including striking joints on unexposed faces, racking out joints on exposed faces, watering, curing and scaffolding etc. complete.	As directed by Engineer in Charge.	Cubic Metre	6894.00	1314.00
913	Concrete Block Masonry	29.04	BDI	Providing and constructing masonry in Autoclaved Areaclaved (Cellular) Concrete Block of aproved manufacturer confirming to IS 2185 Part III 1984 of size (625x240x225)mm in extra fine jointing mortar of fixoblock of Ultra Tech or equivalent in foundaions and plinth of inner walls/in plinth external walls including bailing out water,striking joints on unexposed faces,racking out joints on exposed faces and watering etc.complete	As directed by Engineer in Charge.	Cubic Metre	7123.00	1452.00
914	Concrete Block Masonry	29.05	BDI	Providing and constructing masonry in Autoclaved Areaclaved (Cellular) Concrete Block of aproved manufacturer confirming to IS 2185 Part III 1984 of size (625x240x225)mm in extra fine jointing mortar of fixoblock of Ultra Tech or equivalent in superstructure including,striking joints,racking out joints watering and scaffolding etc.complete	As directed by Engineer in Charge.	Cubic Metre	7199.00	1528.00
915	Concrete Block Masonry	29.06	BDI	Providing and constructing masonry in Autoclaved Areaclaved (Cellular) Concrete Block of aproved manufacturer confirming to IS 2185 Part III 1984 of size (625x 240x100)mm in extra fine jointing mortar of fixoblock of Ultra Tech or equivalent in half brick thick wall including 2 hoop iron strips 25mm x 1.6mm at every third course,properly bend and bonded at ends scaffolding racking out joints and watering compete	As directed by Engineer in Charge.	Square Metre	896.00	186.00
916	Concrete Block Masonry	29.11	BDI	Providing Green Build Product (GBP) Build Fast Plus masonry ecofriendly wet mix /Blocks laying Adhesive is a pre-polymerized, wet mix jointing adhesive which is suitable for Building masonry walls with all kind of blocks with thickness of thin layer of 2mm to 4mm between masonry units. There is no need to pre-wet the Blocks nor to post cure the wall with water.Confirming to IS 2185 of size 75 x 240x 650 mm in superstructure including striking joints, racking outjoints faces and scaffolding etc. complete.	(As directed by Engineer in Charge)	Square Metre	1385.00	516.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
917	Concrete Block Masonry	29.12	BDI	Providing Green Build Product (GBP) Build Fast Plus masonry ecofriendly wet mix /Blocks of size 100 X 240 x 650 mm laying Adhesive is a pre-polymerized, wet mix jointing adhesive which is suitable for Building masonry walls with all kind of blocks with thickness of thin layer of 2mm to 4mm between masonry units. There is no need to pre-wet the Blocks nor to post cure the wall with water.Confirming to IS 2185 of size in superstructure including striking joints, racking out joints faces and scaffolding etc. complete.	As directed by Engineer in Charge.	Square Metre	1543.00	589.00
918	Concrete Block Masonry	29.13	BDI	Providing Green Build Product (GBP) Build Fast Plus masonry ecofriendly wet mix /Blocks of size 200 X 240 x 650 mm laying Adhesive is a pre-polymerized, wet mix jointing adhesive which is suitable for Building masonry walls with all kind of blocks with thickness of thin layer of 2mm to 4mm between masonry units. There is no need to pre-wet the Blocks nor to post cure the wall with water.Confirming to IS 2185 of size in superstructure including striking joints, racking out joints faces and scaffolding etc. complete.	As directed by Engineer in Charge.	Square Metre	2540.00	663.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
919	Expansion Joint	30.01	BDK 1	Providing expansion joints in R.C.C. framed structure (interior column) with plain premoulded filler 25 mm thick including fixing T.W. battens on both faces and finishing as directed etc. Complete.	Bd.K.1 Page Number 359	Square Metre	3674.00	1039.00
920	Expansion Joint	30.02	BDK 1	Providing expansion joints in R.C.C. framed structure (exterior Columns) with plain premoulded filler 25 mm thick and 3 mm thick alluminium plate, hold fast, fixing T.W. battens on internal face, finishing etc. complete as directed.	Bd.K.1 Page Number 359	Square Metre	4331.00	1066.00
921	Expansion Joint	30.03	BDK 1	Providing expansion joints in R.C.C. framed structure (at floor level) with premoulded filler 25 mm thick and 3 mm thick aluminium plate as required, bitumen poured filler and fixing T.W. battens on rear faces etc. complete as directed.	Bd.K.1 Page Number 359	Square Metre	4439.00	1050.00
922	Expansion Joint	30.04	BDK 1	Providing expansion joints in R.C.C. framed structure (at terrace level) with premoulded filler 25 mm thick and 3 mm thick aluminium plate as required, bituminous poured filler, fixing lead, flashing on upper side and T.W. battens on inner face finishing etc. Complete as directed.	Bd.K.1 Page Number 359	Square Metre	4336.00	964.00
923	Expansion Joint	30.05	BDK 1A	Providing expansion joints in reinforced cement concrete framed structure (interior columns) with plain premoulded filler with confirming to IS 1838,1961, 25 mm thick with 75 mm wide and 1 mm thick stainless steel plate finishing etc. complete as directed	Bd K 1 A	Square Metre	4584.00	1721.00
924	Expansion Joint	30.06	BDK 1B	Providing expansion joints in R.C.C. framed structure (exterior column) with plain premoulded filler 25 mm thick with 75 mm wide and 1 mm thick stainless steel plate and finishing etc. complete.	Bd.K.1 B	Square Metre	4769.00	1721.00
925	Expansion Joint	30.07	BDK 1C	Providing expansion joints in R.C.C. framed structure (at floor level) with plain premoulded filler 25 mm thick with 75 mm wide and 1 mm thick stainless steel plat and finishing etc. complete.	Bd.K.1 C	Square Metre	5345.00	681.00
926	Expansion Joint	30.08	BDK 1D	Providing expansion joints in R.C.C. framed structure (at Terrace level) with premoulded filler 25 mm thick with 40 mm wide and 1 mm thick stainless steel plate as required, bitumen poured filler and finishing etc. complete as directed.	Bd.K.1 D	Square Metre	5321.00	681.00
927	Expansion Joint	30.09	BDK	Providing and fixing of BITUFLEX CLOSE CELL FOAM of size 30 mm x 30 mm in double layer in the expansion joints in R.C.C framed structure (at floor level / at terrace level / interior columns) for overlapping of closed cell foam joints, applying TP- 40 PRIMER on both the sides of concrete surface, filling the 25 mm x 25 mm gap with the POLYDEE-41 highly flexible sealant and covering the joint with Polydee-LM, 150 mm width in 2 coats etc. complete.	As directed by Engineer in charge	Running Metre	2069.00	236.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
928	Expansion Joint	30.10	BDK	Providing and fixing of BITUFLEX CLOSE CELL FOAM of size 30 mm x 30 mm in double layer in the expansion joints in R.C.C. framed structure (Exterior column) with closed cell foam , applying TP-40 PRIMER on both the sides of concrete surface, filling the 25 mm x 25 mm gap with the POLYSEAL, highly flexible sealant and covering the joint with Polydee-LM, 150 mm width in 2 coats and fixing the aluminium plate of 100 mm wide and 3 mm thick on external face of column etc. complete.Note- for item Number 9 and 10 Prior approval of Superintending Engineer is Necessary before execution of work.	As directed by Engineer in charge	Running Metre	2027.00	180.00
929	Expansion Joint	30.11		Providing and fixing bituminous pad 25mm thick for expansion joints in retaining wall, compound wall etc. complete.	As directed by Engineer in charge	Square Metre	1435.00	170.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
930	Water Proofing	31.01	BDJ 2	Providing and laying damp proof course 50 mm thick in M20 cement concrete layer and bitumen / using cement with waterproofing compound curing, formwork etc. complete.	Bd.J.2 Page Number 355	Square Metre	386.00	89.00
931	Water Proofing	31.02	BDJ 3	Providing and applying Bitumen VG30/VG40 layer at 2 Kilogram. per square meter over the terrace, structural slab including cleaning the surface for waterproofing as directed complete	Bd.J.3 Page Number 356	Square Metre	100.00	14.00
932	Water Proofing	31.03	BDJ	Providing leak proof treatment by Injection grouting method to old floor without removing tiles of W.C., bath, with cement sand proportion of 1:1.5 and waterproofing compound at 2 Kilogram/bag of cement mixed in 35 liters of water including drilling holes in required position grouting with above mixed solution and ceiling etc. complete.	As directed by Engineer in charge.	Litre	35.00	13.00
933	Water Proofing	31.04	BDJ	Providing cement based water proofing treatment to terraces (Indian water proofing or alike) with brick bats laid in required slope to drain the water for any span after cleaning the base surface. Applying a coat of cement slurry admixed with approved water proofing compound and laying the brick bats on bottom layer in C.M.1:5 admixed with approved water proofing compound filling up to half depth of brick bats, curing this layer for 3 days, applying cement slurry over this layer joints of brick bats with C.M.1:3 admixed with approved water proofing compound and finally top finishing with average 20 mm. thick layers of same mortar added with jute fiber at 1Kilogramper bag including finishing the surface smooth with cement slurry admixed with approved water proofing compound. Marking finished surface with false squares of 300mm x 300 mm. making the junctions at the parapet rounded and tapered top for required height, with drip mould at the junction of plaster and parapet and curing and covering 10 years Guarantee against leakproofness on Court fee stamp paper of Rs. 500/- including ponding test etc. complete.	As directed by Engineer in charge.	Square Metre	1041.00	553.00
934	Water Proofing	31.05	BDJ	Providing water proof bedding for flooring of Bath and WC 25 mm thick in C.M. 1:3 including using approved water proofing compound in specified proportion as per manufacturers specifications for per bag of cement including leveling, curing and covering 10 years guarantee on court fee stamp paper of Rs.500/- including ponding test etc. complete.	As directed by Engineer in charge.	Square Metre	386.00	192.00
935	Water Proofing	31.06	BDJ	Providing waterproof plaster in W.C. and bath 12 mm thick for dado in cement mortar 1:3 with neat finishing, floating using waterproofing compound at the rate of 1 Kilogram. per bag of cement of approved make and manufacturer and curing etc. complete. (Excluding Tiles) (As directed by Engineer in Charge)	As directed by Engineer in charge.	Square Metre	351.00	218.00

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936	Water Proofing	31.07	BDJ	Providing waterproof plaster in W.C. and bath 20 mm thick for dado in cement mortar 1:3 with neat finishing, floating using waterproofing compound at the rate of 1 Kilogram. per bag of cement of approved make and manufacturer and curing (and filling joints of Nahani trap and any outlet by properly) etc. complete.	As directed by Engineer in charge.	Square Metre	480.00	249.00
937	Water Proofing	31.08	BDJ	Removing the tar or coba and disposing of the material as directed etc. complete.	As directed by Engineer in charge.	Square Metre	24.00	24.00
938	Water Proofing	31.09	BDJ	Providing and applying water proofing treatment using acrylic polymer modified cement based water proofing coating with fibre glass mesh mixing at the rate of powder to liquid (2:1) by weight covering 9 to 10 Square Metre /Kilogram with two coat using approved chemicals for masonry and concrete surface by brush covering 7 years guarantee on Stamp Papers etc. complete.	As directed by Engineer in charge	Square Metre	570.00	289.00
939	Water Proofing	31.10	BDJ	Providing and laying jointless Polydee-LM, a highly flexible elastometric coating for RCC / cementitious surface for terrace waterproofing on B.B. Coba / R.C.C., after application of TP-42 Primer on perfectly clean surface (free from loose dust and foreign matter) application of 1st coat of Polydee-LM @ 700 gms/Square Metre and applying 2nd coat of Polydee-LM @ 700 gms/Square Metre and finishing the same with sprinkling the AG-10 granules on the wet coating. (After finishing covering the treatment with 25mm cement plaster for protection with fibrillated 6mm Plyplast fibre @ 125 gms/Square Metre to be paid in separate item.) covering 7 years guarantee on Court Fee Stamp Paper of Rs. 100/- etc. complete.	As directed by Engineer in charge	Square Metre	1258.00	215.00
940	Water Proofing	31.11	BDJ	Providing and applying a base coat comprising of 1KilogramPolydee-MC and 1Kilogramfresh cement after wetting the surface followed by drying the surface for 2 days, apply primer coat of TP-40 and after drying, applying Polydee-11 two component (mixing ratio 2 A : 1 B) Antibacterial food grade coating inside drinking water tank in two coats with time interval of minimum 8 hrs. covering 7 years guarantee on Court Fee Stamp Paper of Rs. 100/- etc. complete.	As directed by Engineer in charge	Square Metre	1153.00	215.00
941	Water Proofing	31.12	BDJ	Providing and fixing 20 to 25 mm thick rough shahabad box type waterproofing for basement or underground floor on a base of Cement concrete 1:3:6, including sub base of 2.50 centimeter thick Cement mortar 1:3 with conceal, secrete (RMW), Algae proof or other alike waterproofing liquids, raking of joints upto 35 mm depth, filling the joints with 6 mm size crushed metal, hand grouting with cement slurry, curing and cleaning, with 7 years guarantee on court fee stamp of Rs. 100/- with ponding test etc complete. (excluding Cement concrete 1:3:6 base concrete)	Bd.J.2 Page Number 355	Square Metre	1150.00	359.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
942	Water Proofing	31.13	BDJ	Providing and fixing 20 to 25 mm thick rough shahabad box type waterproofing treatment to vertical outside faces of Reinforced Cement concrete walls of basement or underground floor including filling the gap of 25 mm between rough shahabad and R.C.C. walls with cement grout mixed with water proofing liquid Algae proof or other alike with one tile lift method, brushing the joints horizontally with cement slurry mixed with water proofing liquid for width 30 to 35 mm and sloping coping over topmost tile with cement mortar 1:3, butting the bottom most with Cement concrete 1:2:4 mixed with water proofing liquid, curing, with 7 years guarantee on court fee stamp of Rs.100/- with ponding test etc complete. (excluding Cement concrete 1:3:6 base concrete)	Bd.J.2 Page Number 355	Square Metre	1208.00	466.00
943	Water Proofing	31.14	BDJ	Providing and laying perforated PVC 160 mm dia pipe in proper line,leveland slope including necessary material fitting etc. complete.	As directed by Engineer in charge	Running Metre	1090.00	358.00
944	Water Proofing	31.15	BDJ	Providing and applying required coats of a water based UV resistant Evercrete Top Seal sealant to protect natural stone, bricks, concrete and wooden structures from water intrusion and staining due to water penetration and algae formation etc complete	As directed by Engineer in charge.	Square Metre	514.00	103.00
945	Water Proofing	31.16	BDJ	Providing and applying required coats of a water based Evercrete Deep Penetrating Sealer (DPS) on cement concrete surface like roads, beams, and columns, plastered walls, basements, roofs, potable water tanks etc to react with cement and to penetrate concrete structure thereby making it resistant to chemicals / chlorides water to make it dust proof and to act as a water resistant at the same time which Strengthens the treated surface and reduce the curing period etc complete. - Note -- for item Number 7 to 4 prior approval of Superintending Engineer will be necessary	As directed by Engineer in charge.	Square Metre	789.00	115.00
946	Water Proofing	31.17		Providing water proofing treatment as per IS : 1346-1966 to generally inaccessible sloping Reinforced Cement Concrete Terrace slab with bitumen felts in all positions in five course, consisting of applying cold bitumen primer coat at the rate of 2.5 litre per 10 Square Metre., hot bitumen layer at the rate of 14.50Kilogramper 10 Square Metre. and over the same layer of bitumen felt of type III grade (I) as per IS: 1332-1965 across the slope with 10 cm overlap commencing at lowest level and again applying hot bitumen course at the rate of 14.50Kilogramper 10 Square Metre. and finally spreading over it grit at the rate of 14.50Kilogramper 10 Square Metre. including all lifts, leads and scaffolding whenever necessary complete as directed with four years' guarantee on requisite stamp paper etc. complete.	As directed by Engineer in charge	Square Metre	550.00	198.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
947	Water Proofing	31.26	BDJ	Providing waterproofing in W.C. and bath including brick bat coba in all position including providing and laying 12mm bedding in cement mortar 1:3 on vergin concrete slab with waterproofing compound @ 1Kilogram/per bag of cement laying brick bat coba of required thickness in cm 1:5 with waterproofing compound 1 Kilogram/bag of cement grouting and finishing the top layer with 20mm thick brick bedding in cm mortar 1:3 with waterproofing compound 1 Kilogram/per bag of cement and testing the treated portion for 48 hours by pond test and covering ten years' guarantee on requisite stamp paper including curing etc. complete.	As directed by Engineer in charge	Cubic Metre	5577.00	3065.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
948	Plastering and Pointing	32.01	BDL 1	Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete.	Bd.L.1 Page Number 367	Square Metre	190.00	151.00
949	Plastering and Pointing	32.02	BDL 1	Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:3 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete.	Bd.L.1 Page Number 367	Square Metre	196.00	151.00
950	Plastering and Pointing	32.03	BDL 2	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:5 without neeru finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete.	Bd. L.2 Page Number 368	Square Metre	257.00	186.00
951	Plastering and Pointing	32.04	BDL 2A	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:4 without neeru finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete.	Bd. L.2 Page Number 368	Square Metre	264.00	186.00
952	Plastering and Pointing	32.05	BDL 2B	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:3 without neeru finish to concrete or brick surfaces, in all position including scaffolding and curing etc. complete.	Bd.L.2 Page Number 368	Square Metre	274.00	186.00
953	Plastering and Pointing	32.06	BDL 4	Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:5 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. complete	Bd.L.4 Page Number 368	Square Metre	359.00	231.00
954	Plastering and Pointing	32.07	BDL 4A	Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:4 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete.	Bd.L.4 Page Number 368	Square Metre	366.00	231.00
955	Plastering and Pointing	32.08	BDL 4B	Providing internal cement plaster 20mm. thick in Single coats in cement mortar 1:3 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. complete.	Bd.L.4 Page Number 368	Square Metre	376.00	231.00
956	Plastering and Pointing	32.11	BDL 7	Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	Bd.L.7 Page Number 369	Square Metre	599.00	376.00
957	Plastering and Pointing	32.12	BDL 8	Providing rough cast cement plaster externally in two coats to concrete, brick or stone masonry surfaces in all positions with base coat of 12 to 15 mm thick in C.M. 1:4 and rough cast treatment 12mm thick in proportion 1:1 1/2:3 including scaffolding and fourteen days curing complete.	Bd.L.8 Page Number 370	Square Metre	529.00	387.00
958	Plastering and Pointing	32.13	BDL 9	Providing rough cast cement plaster externally in two coats with coloured cement finish to concrete/ brick/ stone masonry surfaces in all positions with base coat 12 to 15 mm. thick in C.M. 1:4 using gray cement and rough cast treatment 12 mm thick in proportion of 1:1 1/2:3 using colour pigment including scaffolding and fourteen days curing etc. complete.	Bd.L.9, Page Number370	Square Metre	536.00	387.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
959	Plastering and Pointing	32.15	BDL 10	Providing neeru finish to plastered surfaces in all positions including scaffolding and curing etc. complete.	Bd. L.10, Page Number370	Square Metre	58.00	51.00
960	Plastering and Pointing	32.16	BDL 15A	Providing flush grooved pointing with cement mortar 1:3 for brick work including scaffolding and curing etc. complete.	Bd. L.15 Page Number 372	Square Metre	160.00	142.00
961	Plastering and Pointing	32.17	BDL 15B	Providing flush grooved pointing with cement mortar 1:3 for stone masonry work including scaffolding and curing etc. complete.	Bd. L.15 Page Number 372	Square Metre	169.00	142.00
962	Plastering and Pointing	32.18	BDL 16	Providing tuck pointing with cement mortar 1:3 for stone/Brick masonry including scaffolding and curing etc. complete.	Bd. L. 16 Page Number 373	Square Metre	166.00	142.00
963	Plastering and Pointing	32.19	BDL 17	Providing weathered pointing with cement mortar 1:3 for stone/ Brick masonry including scaffolding and curing etc. complete.	Bd. L. 17 Page Number 373	Square Metre	166.00	142.00
964	Plastering and Pointing	32.20	BDL 18	Providing vee pointing with cement mortar 1:3 for stone / Brick masonry including scaffolding and curing etc. complete	Bd. L. 18 Page Number 373	Square Metre	160.00	142.00
965	Plastering and Pointing	32.21	BDL	Providing fine cement finish 1.5 mm thick over green plaster surface including scaffolding curing etc. complete.	As directed by Engineer in charge.	Square Metre	66.00	52.00
966	Plastering and Pointing	32.22	BDL	Labour charges for providing groove in external plaster having width and spaced as directed by engineer incharge etc. complete.	As directed by Engineer in charge.	Running Metre	45.00	45.00
967	Plastering and Pointing	32.23	BDL	Providing patti/ band 75mm wide on plastered surface 12 mm to 15 mm thick in C.M. 1:3 line and level including neat finishing scaffolding curing etc. complete.	As directed by Engineer in charge.	Running Metre	48.00	40.00
968	Plastering and Pointing	32.24	BDL	Providing patti/ band 100mm wide on plastered surface 12 mm to 15 mm thick in C.M. 1:3 line and level including neat finishing scaffolding curing etc. complete.	As directed by Engineer in charge.	Running Metre	63.00	52.00
969	Plastering and Pointing	32.25	BDL	Providing patti/ band 150mm wide on plastered surface 12 mm to 15 mm thick in C.M. 1:3 line and level including neat finishing scaffolding curing etc. complete.	As directed by Engineer in charge.	Running Metre	76.00	60.00
970	Plastering and Pointing	32.26	BDL	Providing and fixing chicken mesh of 22 gauge, with about 30 cm. width at the junction of R.C.C members and brick work, of approved quality including fixing mesh in position by necessary drilling in concrete /B.B.masonry and or tying by binding wire etc. complete.	As directed by Engineer in Charge:	Running Metre	128.00	42.00
971	Plastering and Pointing	32.27	BDL	Providing and applying plaster with plaster of paris in 6mm thickness to previously plaster surface in all position including preparing the surface scaffolding etc. complete.	As directed by Engineer in Charge.	Square Metre	130.00	72.00
972	Plastering and Pointing	32.28	BDL	Providing and applying spray plaster made with finely graded marble and quartz in 2 mm thickness in two coats using putty knife or trowel to newly plaster fairly even surface after minimum 30 days gap in all position including finishing the surface using zero number sand paper or fine emry paper gently level the area by moving paper in round circles removing the dust and clean the surface with dry cloth and scaffolding including all materials and labour etc. complete.	As directed by Engineer in Charge.	Square Metre	302.00	55.00

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973	Plastering and Pointing	32.29	BDL	Providing and applying laying Aggregate plaster in granite / marble stones, as decorative finish to give granite / marble like appearance to concrete, brick or block surfaces in all position including preparation of surface smoothly, evenly by racking of joints in case of Brick or block work including backing layer of 12 mm thick with cement mortar 1:3 with 2% integral cement water proofing compound, roughening for wall keying hardening and drying the surface for a minimum five days gaps including second coat of cement lime mortar into a proportion 1:4 preparing the surface for three coat of marble finish plaster giving a thin coat of white cement and two parts of course calcite powder, applying the mortar with steel float on the surface in proper evenness applying at coat of white cement and lime to set a smooth finish then applying a thin coat of slurry made of white cement and black oxide colour in required proportion by the steel float to get black streaks on the surface and curing the surface for two days including all materials and labour etc. complete.	As directed by Engineer in Charge.	Square Metre	1409.00	615.00
974	Plastering and Pointing	32.30	BDL	Providing and applying plaster / wall punning with plaster of paris (with plaster of paris material of Ambuja / Mor Chap or equivalent make) in 10 to 13 millimeter thickness to previously plastered surface / or on newly brick surface (Excluding rough cast plaster) in all position including preparing and Finishing the surface scaffolding etc.complete.	As directed by Engineer in charge.	Square Metre	514.00	177.00
975	Plastering and Pointing	32.31	BDL	Providing and applying gypsum plaster (with Gypsum material of Gypsum India / Mega Sign or equivalent make) with finishing with gypsum material in 10 to 13 millimeter thickness to previously plastered surface / or on newly brick surface (Excluding rough cast plaster) in all position including preparing and Finishing the surface scaffolding etc.complete.	As directed by Engineer in charge.	Square Metre	601.00	177.00
976	Plastering and Pointing	32.32	BDL	Providing and applying Texture plaster with finishing with texture material of approved make in 3 to 4 millimeter thickness on previously plastered surface, including Plaster Groove 6mm thickness or Tape Grooves 35 to 45 mm thickness or as required, in all position including preparing the surface, scaffolding etc. complete.	As directed by Engineer in charge.	Square Metre	569.00	102.00
977	Plastering and Pointing	32.33	BDL	Removing the existing cement plaster of any thickness without causing dust nuisance and stacking the debris upto a distance of 50 metres or spreading in the compound and cleaning the site etc. complete.	As directed by Engineer in charge.	Square Metre	47.00	47.00
978	Plastering and Pointing	32.34	BDL	Providing and applying Two coats of wall care Putty on plastered surface and Ceiling and Walls to prepare surface even and smooth of approved make, etc complete.	As directed by Engineer in charge.	Square Metre	87.00	48.00
979	Plastering and Pointing	32.36	BDL	Providing cement patta / band of 2.50 cm width on either side of edges of plaster for doors and windows including scaffolding ,finishing, curing etc. complete.	As directed by Engineer in charge.	Square Metre	37.00	29.00

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980	Plastering and Pointing	32.37	BDL	Providing groove to required size at specified location as directed by Engineer, at junction of brick masonry wall and R.C.C beams or Column, at junction of composite masonry, including scaffolding, finishing, curing etc. complete.	As directed by Engineer in charge.	Running Metre	37.00	37.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
981	Paving Flooring and dado	33.01	BDM 1	Providing and laying Rough Shahabad Stone Flooring 25mm to 30mm thick and of required width in plain/ diamond pattern on a bed of 1:6 C.M. including cement float, striking joints, pointing in cement mortar 1:3 curing and cleaning etc. complete.	Bd.M.1 Page Number 379	Square Metre	669.00	265.00
982	Paving Flooring and dado	33.02	BDM 1A	Providing and laying Rough Shahabad Stone Flooring 40mm.to 45 mm. thick and of required width in plain/ diamond pattern on a bed of 1:6 C.M. including cement float, striking joints, pointing in cement mortar 1:3 curing and cleaning etc. etc. complete	Bd.M.1 Page Number 379	Square Metre	740.00	273.00
983	Paving Flooring and dado	33.03	BDM 1B	Providing and laying Rough Shahabad Stone Flooring 50mm to 60mm thick and of required width in plain/ diamond pattern on a bed of 1:6 C.M. including cement float, striking joints, pointing in cement mortar 1:3 curing and cleaning etc. etc. complete.	Bd.M.1 Page Number 379	Square Metre	810.00	285.00
984	Paving Flooring and dado	33.04	BDM 3	Providing and laying Polished Shahabad Stone flooring 25mm to 30mm thick and required width wide in plain/ diamond pattern on a bed of 1:6 C.M. including cement float, filling joints, with neat cement slurry, curing, polishing and cleaning etc. complete.	Bd.M.3 Page Number 380	Square Metre	750.00	267.00
985	Paving Flooring and dado	33.05	BDM 3A	Providing and laying Polished Tandur Stone flooring 25mm to 30mm thick required width in plain/ diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete.	Bd.M.3 Page Number 380	Square Metre	962.00	336.00
986	Paving Flooring and dado	33.06	BDM 3B	Providing and laying machine cut machine Polished Kota stone flooring 25mm to 30mm thick and required width in plain/ diamond pattern on bed of 1:6 C. M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete.	Bd.M.3 Page Number 380	Square Metre	1157.00	299.00
987	Paving Flooring and dado	33.07	BDM	Providing and laying handcut polished Kotah Stone flooring 25mm to 30mm thick and 30cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete.	Bd.M.3 Page Number380	Square Metre	1092.00	256.00
988	Paving Flooring and dado	33.08	BDM	Providing and laying polished hand cut Kotah Stone flooring 25mm to 30mm thick and 45cm to 55cm wide in plain/diamond pattern on a bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.	Bd.M.3 Page Number380	Square Metre	1218.00	256.00
989	Paving Flooring and dado	33.09	BDM 7	Providing and laying cement concrete flooring 40 mm thick with M15 cement concrete laid to proper level and slope in alternate bays including compaction, filling joints, marking lines to give the appearance of tiles of 30 cm x 30 cm or other size laid diagonally /square etc finishing smooth (with extra cement) in any colour as directed and curing etc. complete.with Crushed sand VSI Grade	Bd.M.7 Page Number 383	Square Metre	486.00	281.00

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990	Paving Flooring and dado	33.10	BDM 7	Providing and laying cement concrete flooring 40 mm thick with M15 cement concrete laid to proper level and slope in alternate bays including compaction, filling joints, marking lines to give the appearance of tiles of 30 cm x 30 cm or other size laid diagonally/ square etc finishing smooth (with extra cement) in any colour as directed and curing etc. complete. With Crushed Sand.	Bd.M.7 Page Number 383	Square Metre	440.00	281.00
991	Paving Flooring and dado	33.11	BDM 6	Providing and laying cement concrete flooring 40mm thick with M20 cement concrete laid to proper level and slope in alternate bays, including compaction, filling joints, marking lines to give appearance of tiles of 30cm x 30cm or other size laid diagonally/square etc. finishing smooth (with extra cement) in any colour as directed and Curing etc. complete. With Crushed sand VSI Grade	Bd.M.6 Page Number 381	Square Metre	492.00	281.00
992	Paving Flooring and dado	33.12	BDM 6	Providing and laying cement concrete flooring 40mm thick with M20 cement concrete laid to proper level and slope in alternate bays, including compaction, filling joints, marking lines to give appearance of tiles of 30cm x 30cm or other size laid diagonally/square etc. finishing smooth (with extra cement) in any colour as directed and Curing etc. complete. With Crushed sand VSI Grade	Bd.M.6 Page Number 381	Square Metre	473.00	281.00
993	Paving Flooring and dado	33.13	BDM 7A	Providing and laying cement concrete flooring 50 mm thick with M15 cement concrete laid to proper level and slope in alternate bays including compaction filling joints, marking lines to give the appearance of tiles of 30cm x 30cm or other size laid diagonally/ square etc finishing smooth (with extra cement) in any colour as directed and curing etc. complete.with Crushed sand VSI Grade	Bd.M.7 Page Number 383	Square Metre	526.00	281.00
994	Paving Flooring and dado	33.14	BDM 7A	Providing and laying cement concrete flooring 50 mm thick with M15 cement concrete laid to proper level and slope in alternate bays including compaction filling joints, marking lines to give the appearance of tiles of 30cm x 30cm or other size laid diagonally/square etc finishing smooth (with extra cement) in any colour as directed and curing etc. complete. With Crushed Sand.	Bd.M.7 Page Number 383	Square Metre	502.00	281.00
995	Paving Flooring and dado	33.15	BDM 6A	Providing and laying cement concrete flooring 50mm thick with M20 cement concrete laid to proper level and slope in alternate bays including compaction, filling joints, marking lines to give the appearance of tiles of 30cm x 30cm or other size laid diagonally/ square etc. finishing smooth (with extra cement) in any colour as directed and curing etc. complete.with Crushed sand VSI Grade	Bd.M.6 Page Number 381	Square Metre	539.00	281.00
996	Paving Flooring and dado	33.16	BDM 6A	Providing and laying cement concrete flooring 50mm thick with M20 cement concrete laid to proper level and slope in alternate bays including compaction, filling joints, marking lines to give the appearance of tiles of 30cm x 30cm or other size laid diagonally/ square etc. finishing smooth (with extra cement) in any colour as directed and curing etc. complete. With Crushed Sand.	Bd.M.6 Page Number 381	Square Metre	423.00	193.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
997	Paving Flooring and dado	33.17	BDM 22	Providing and laying machine cut machine polished shahabad Stone slabs 20 to 25mm thick for treads and risers of steps and staircases, with rounded nosing for the treads on a bed of 1:4 cement mortar including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete.	Bd.M.22 Page Number 390	Square Metre	1026.00	524.00
998	Paving Flooring and dado	33.18	BDM 22B	Providing and laying machine cut machine polished machine cut Kota stone slabs 20 to 25 mm thick for treads and risers of steps and staircases, with rounded nosing for the treads on a bed of 1:4 cement mortar including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete.	Bd.M.22 Page Number 390	Square Metre	1420.00	524.00
999	Paving Flooring and dado	33.19	BDM 29B	Providing sills of polished Kota stone 25 mm to 30mm thick, on a bed of 1:4 cement mortar including cement float, filling joints with slurry, curing,moulding edges, polishing and cleaning etc. complete.	Bd.M.29 Page Number 391	Square Metre	1156.00	307.00
1000	Paving Flooring and dado	33.20	BDM 29C	Providing sills of polished Kadappa stone 25mm to 30mm thick, on a bed of 1:4 cement mortar including cement float, filling joints with slurry, curing polishing and cleaning etc. complete.	Bd.M.29 Page Number 391	Square Metre	1010.00	307.00
1001	Paving Flooring and dado	33.21	0	Providing sills of required material 20mm to 25mm thick, on a bed of cement mortar 1:4 including cement float, filling joints with neat cement slurry, curing, polishing, moulding edges, cleaning complete. a) Marble other than white makrana	Spec.Number: Bd.M.31/Page Number392	Square Metre	2034.00	307.00
1002	Paving Flooring and dado	33.22	0	Providing sills of required material 20mm to 25mm thick, on a bed of cement mortar 1:4 including cement float, filling joints with neat cement slurry, curing, moulding edges, polishing,cleaning complete. b) Granite	Spec.Number: Bd.M.31/Page Number393	Square Metre	3670.00	307.00
1003	Paving Flooring and dado	33.23	BDM 15	Providing and fixing black kadappa stone as shelves 25mm. thick machine polished, extending the polish upto 20 cm width on lowerside, rounding corners, laying in position jointing with bedding cement mortar 1:4 proportion curing etc etc. complete.	Bd.M.29 Page Number 391	Square Metre	1114.00	349.00
1004	Paving Flooring and dado	33.24	BDM 12	Providing and laying matt finish ceramic tiles of having size 30 cm x 30 cm confirming to I.S.15622/2006 (group D II-A) and 7 to 8 mm thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete.	Bd.M.12 Page Number 385.	Square Metre	1083.00	325.00
1005	Paving Flooring and dado	33.25	BDM 13	Providing and laying ceramic tiles of having size 30 cm. x 30 cm. and confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	Bd.M.13 Page Number 386.	Square Metre	1150.00	397.00
1006	Paving Flooring and dado	33.26	BDM 13	Providing and laying ceramic tiles having size 30 cm. x 45 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	Bd.M.13 Page Number 386.	Square Metre	1171.00	394.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1007	Paving Flooring and dado	33.27	BDM 13	Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	Bd.M.13 Page Number 386.	Square Metre	1252.00	397.00
1008	Paving Flooring and dado	33.28	BDM	Providing Mirror polishing to Kota Stone including using all necessary stones and equipments cleaning, washing etc. complete. For Flooring	As directed by Engineer in charge.	Square Metre	128.00	33.00
1009	Paving Flooring and dado	33.29	BDM	Providing Mirror polishing to Kota Stone including using all necessary stones and equipments cleaning, washing etc. complete. For Skirting	As directed by Engineer in charge.	Running Metre	61.00	33.00
1010	Paving Flooring and dado	33.30	BDM	Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete.	As directed by Engineer in charge	Square Metre	710.00	175.00
1011	Paving Flooring and dado	33.31	BDM	Providing and laying in situ cement concrete M30 with tremix treatment for 200 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete.	As directed by Engineer in charge	Square Metre	1318.00	316.00
1012	Paving Flooring and dado	33.32	BDM 35	Providing 25 mm to 30 mm thick partition of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. a) One side polish	Bd.M.35 B/P Number393	Square Metre	920.00	303.00
1013	Paving Flooring and dado	33.33	BDM 35	Providing 25 mm to 30 mm thick partition of polished black kadappa stone slab of approved quality including giving required size and shape etc. Fixing in cement mortar 1:3 curing and cement etc. complete. b) Both side polish	Bd.M.35 B/P Number393	Square Metre	1056.00	303.00
1014	Paving Flooring and dado	33.34	BDM 3	Providing and laying in position flooring of telephone black / Amba White / Cat bary brown / Ruby red / Ocean Brown granite stone of approved shade and size 18 mm to 20 mm thick on bed 1:6 cement mortar including cement floats striking joints, pointing in C.M. 1:3 curing and cleaning etc. complete.	Bd.M. 3 B/Page Number 380	Square Metre	3795.00	303.00
1015	Paving Flooring and dado	33.35	BDM 22	Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown / RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with full moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete.	Bd. M.22 B/Page Number 390	Square Metre	3925.00	401.00
1016	Paving Flooring and dado	33.36	BDM 35	Providing and fixing machine cut mirror polished 18 mm to 20 mm thick telephone black granite / Amba White / Cat bary brown / RBI red / Ocean Brown granite stone partition with full moulding the edges etc. complete . Both side polish	Bd.M.35 B/Page Number393	Square Metre	3794.00	303.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1017	Paving Flooring and dado	33.37	BDM 35	Providing and fixing machine cut mirror polished 18 mm to 20 mm thick telephone black / Amba White / Cat bary brown / RBI red / Ocean Brown granite stone partition with full moulding the edges etc. complete. One side polish	Bd.M.35 B/Page Number393	Square Metre	3788.00	303.00
1018	Paving Flooring and dado	33.38	BDM 35	Providing and preparing kitchen otta up to 75 cm width,made up from 30 mm thick and 75 cm high vertical support for kadppa at 1 m. c/c of 25 mm thick both side polished kadappa middle shelf and bottom of 20 mm thick one side polished kadappa with facia patti of 20 x 50 mm kadappa including all material labour cutting fixing with cement mortar and araldite curing polished and cleaning etc. complete.	Bd.M.35C / Page Number 393	Square Metre	2602.00	361.00
1019	Paving Flooring and dado	33.39	BDM 35	Providing and fixing 1.5 mm thick polyvenyl vinyl chloride flooring including leveling the base with white cement including pasting with appropriate material cleaning the surface etc. complete	Bd.M.35C / Page Number 393	Square Metre	575.00	152.00
1020	Paving Flooring and dado	33.40	BDM 12	Providing and laying vitrified mirror / glossy finish tiles decorative type having size 590 mm to 605 mm x 590 mm to 605 mm of 8 to 10 mm thickness and confirming to IS. 15622-2006 (group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1:4 cement mortar including neat cement float, filling joints, curing and clearing etc. complete.	Bd.M. 12 Page Number385	Square Metre	1098.00	249.00
1021	Paving Flooring and dado	33.41	BDM 12	Providing and laying vitrified mirror / glossy finish tiles having size 590 mm to 605 mm x 590 mm to 605 mm of 8 to 10 mm thickness and confirming to IS. 15622-2006 (group Bla) of approved make, shade and pattern for dado and skirting in required position fixed in 1:4 cement mortar including neat cement float, filling joints, curing and clearing etc. complete	Bd.M. 12 Page Number385	Square Metre	1167.00	321.00
1022	Paving Flooring and dado	33.42	BDM 12	Providing and laying vitrified matt fininsh tiles having size 590 mm to 605 mm x to 605 mm of 8 to 10 mm thickness and confirming IS. 15622-2006 (Group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1:4 cement morar including neat cement float, filling joints, curing and cleaning etc. complete.	Bd.M.12 Page Number 385	Square Metre	1526.00	249.00
1023	Paving Flooring and dado	33.43	BDM 12	Providing and laying vitrified matt finish tiles having size 590 mm to 605 mm x to 605 mm of 8 to 10 mm thickness and confirming IS. 15622-2006 (Group Bla) of approved make, shade and pattern for dado and skirting in required position fixed in 1:4 cement mortar including neat cement float, filling joints, curing and cleaning etc. complete.	Bd.M.12 Page Number 385	Square Metre	1916.00	321.00
1024	Paving Flooring and dado	33.44	BDM 12	Providing and laying vitrified rustic matt stone finish tiles having size 590 mm to 605 mm x 590 mm to 605 mm of 8 to 10mm thickness and confirming to IS. 15622-2006 (Group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1:4 cement mortar including neat cement float, filling joints, curing and cleaning etc. complete.	Bd.M.12 Page Number 385	Square Metre	1671.00	325.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1025	Paving Flooring and dado	33.45	BDM 12	Providing and laying vitrified rustic matt stone finish tiles having size 590 mm to 605 mm x 590 mm to 605 mm to 8 to 10mm thickness and confirming to IS. 15622-2006 (Group Bla) of approved make, shade and pattern for dado and skirting in required position fixed in 1:4 cement mortar including neat cement float, filling joints, curing and cleaning. etc. complete.	Bd.M.12 Page Number 385	Square Metre	1740.00	397.00
1026	Paving Flooring and dado	33.46	BDM 12	Providing and laying vitrified stone effect finish tiles having size 590 to 605 mm x 590 to 605 mm of 8 to 10 mm thickness and confirming to IS. 15622-2006 (Group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1:4 cement mortar including required position laid on a bed of 1:4 cement mortar including neat cement float, filling joints, curing and cleaning etc. complete	Bd.M. 12 Page Number 385	Square Metre	1671.00	325.00
1027	Paving Flooring and dado	33.47	BDM 12	Providing and laying vitrified stone effect finish tiles having size 590 to 605 mm x 590 to 605 mm of 8 to 10 mm thickness and confirming to IS. 15622-2006 (Group Bla) of approved make, shade and pattern for dado and skirting in required position fixed in 1:4 cement mortar including required position laid on a bed of 1:4 cement mortar including neat cement float, filling joints, curing and cleaning etc. complete.	Bd.M. 12 Page Number 385	Square Metre	1740.00	397.00
1028	Paving Flooring and dado	33.48	BDM 12	Providing and fixing green marble of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing / moulding the sharp edges wherever necessary, curing, etc. complete.	Bd. M. 12	Square Metre	2242.00	291.00
1029	Paving Flooring and dado	33.49	BDM	Providing and fixing heavy duty inter locking concrete Grey paving blocks of 60 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete.	A directed by Engineer in charge	Square Metre	863.00	92.00
1030	Paving Flooring and dado	33.50	BDM	Providing and fixing heavy duty inter locking concrete Grey paving blocks of 80 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete.	A directed by Engineer in charge	Square Metre	963.00	92.00
1031	Paving Flooring and dado	33.51	BDM	Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 60 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete	A directed by Engineer in charge	Square Metre	825.00	92.00
1032	Paving Flooring and dado	33.52	BDM	Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 80 mm thickness of having a strength of 300 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete	As directed by Engineer in charge	Square Metre	1089.00	92.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1033	Paving Flooring and dado	33.53	BDM 12	Providing and fixing heavy duty inter locking concrete RUBBER MOULD GLOSSY PAVING BLOCKS of 60 millimeter thickness of having a strength of 400 Kilogram/sq.m of approved quality and shape on a bed of crushed sand of 25 to 30 millimeter thick including striking joints and cleaning etc. complete. (using 100% crushed sand)	Bd. M-12 page Number 385	Square Metre	885.00	92.00
1034	Paving Flooring and dado	33.54	BDM	Providing and fixing heavy duty inter locking concrete Rubber mould glossy paving blocks of 80 mm thickness of having a strength of 400 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete. (using 100% crushed sand)	Bd. M.	Square Metre	1288.00	92.00
1035	Paving Flooring and dado	33.55	BDM	Providing and fixing heavy duty inter locking concrete Coloured paving blocks of 40 mm thickness of having a strength of 200 Kilogram/Sq.cm. of approved quality and shape on a bed of crushed sand of 25 to 30 mm thick including skirting joints and cleaning etc. complete.	As directed by Engineer in charge	Square Metre	777.00	92.00
1036	Paving Flooring and dado	33.56	BDM	Providing leather finished polishing to Granite Stone slab by continuous grinding in 4 coats of different bits to receive rough and matt finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	As directed by Engineer in charge	Square Metre	616.00	145.00
1037	Paving Flooring and dado	33.57	BDM	Providing leather finished polishing to Kota / Marble / Shahabad / Kadappa Stone slab by continuous grinding in 4 coats of different bits to receive rough and matty finish including buffing process before laying and fixing of stone as per drawing and design, including cleaning, washing and finishing etc. complete.	As directed by Engineer in charge	Square Metre	522.00	145.00
1038	Paving Flooring and dado	33.58	BDM 12	Providing and laying Vitrified mirror/glossy finish having decorative type of size 590 millimeter to 605 millimeter x 590 millimeter to 605 millimeter of 8 to 10 millimeter thickness (on a existing flooring) with bonding chemical and confirming to IS 15622-2006 (Group Bla) of approved make shade and pattern for flooring in required position laid on a bed of bonding chemical filling joints curing and cleaning etc . complete.	Bd. M-12 page Number 385	Square Metre	1124.00	143.00
1039	Paving Flooring and dado	33.59	0	Providing and laying Vitrified MATT finish having decorative type of size 600 millimeter x 600 millimeter of 8 to 10 millimeter thickness (on a existing flooring) with bonding chemical and confirming to IS 15622-2006 (Group Bla) of approved make shade and pattern for flooring in required position laid on a bed of bonding chemical filling joints curing and cleaning etc .complete.	Bd. M-12 page Number 386	Square Metre	1547.00	143.00

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1040	Paving Flooring and dado	33.61	0	Providing and laying Vitrified MATT finish having decorative type of size 1000 millimeter x 1000 millimeter of 8 to 10 millimeter thickness (on a existing flooring) with bonding chemical and confirming to IS 15622-2006 (Group Bla) of approved make shade and pattern for flooring in required position laid on a bed of bonding chemical filling joints curing and cleaning etc .complete.	Bd. M-12 page Number 388	Square Metre	2175.00	143.00
1041	Paving Flooring and dado	33.62	0	Providing and laying Vitrified RUSTIC MATT STONE finish having decorative type tiles of size 600 millimeter x 600 millimeter of 8 to 10 millimeter thickness (on a existing flooring) with bonding chemical and confirming to IS 15622-2006 (Group Bla) of approved make shade and pattern for flooring in required position laid on a bed of bonding chemical filling joints curing and cleaning etc. complete.	Bd. M-12 page Number 386	Square Metre	1652.00	179.00
1042	Paving Flooring and dado	33.65	BDM 12	Providing and laying Vitrified STONE EFFECT FINISH having decorative type tiles of size 590 millimeter to 605 millimeter x 590 millimeter to 605 millimeter of 8 to 10 millimeter thickness (on a existing flooring) with bonding chemical and confirming to IS 15622-2006 (Group Bla) of approved make shade and pattern for flooring in required position laid on a bed of bonding chemical filling joints curing and cleaning etc. complete.	Bd. M-12 page Number 385	Square Metre	1690.00	179.00
1043	Paving Flooring and dado	33.66	BDM	Providing and laying chequered tiles of approved quality of size 30 cm x 30 cm, confirming to corresponding I.S. for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with cement slurry cleaning curing etc. complete.	Bd. M-12 page Number 385	Square Metre	677.00	181.00
1044	Paving Flooring and dado	33.67	BDM	Providing and laying Antiskid Ceramic tiles of approved quality of size 30 cm x 30 cm and confirming to IS 15622-2006 (Group-B IIA) for antiskid flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with cement slurry cleaning curing etc. complete.	Bd. M-12 page Number 385	Square Metre	1079.00	325.00
1045	Paving Flooring and dado	33.68	BDM	Providing and laying telephone black / Amba White / Cadburybrown / Ruby red / Ocean Brown granite stone of 18 to 20 mm thick for door frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing/moulding the sharp edges wherever necessary, curing, etc. complete.	As directed by Engineer-In-Charge	Square Metre	4133.00	622.00
1046	Paving Flooring and dado	33.75	BDM	Providing and laying Polished Kota stone flooring With Hand-Cut Polished Kota Stones 25mm to 30mm thick and required width in plain/diamond pattern on bed of 1:6 Cement mortar including cement float, filling joints with neat cement slurry, curing, cleaning and Mirror Polishing etc. complete Note- Water absorption for <u>kota stone</u> should not exceed 0.05%.(Item to be used with prior permission of Superintending Engineer)	Bd. M-3 page Number 380	Square Metre	1413.00	439.00

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1047	Paving Flooring and dado	33.76	BDM	Providing, laying and fixing exterior grade fibrilling fibre reinforcement heavy duty designer cement concrete tiles for Flooring of approved colour and design 22 +/- 2 mm thick bayer colour pigmented as per IS 1237 - 1980 having compressive strength more than 500 Kilogram/sq.cm reaffirmed in 2006 ,having wert transvrse strength of 3.5 / mm 2, water absorption less than 10 % abrasion / wear resistance less than 2 mm ,skid resistance more than 25.0 (ASTM:E303) and no fading as per DIN - 51094 of size 300 x 300 in plan / designed pattern on a bed of 1:4 cement mortar including cement float ,filling joints with neat cement slurry ,curing, polishing and cleaning etc. complete. For flooring.	As directed by Engineer-In-Charge	Square Metre	1062.00	325.00
1048	Paving Flooring and dado	33.77	BDM	Providing, laying and fixing exterior grade fibrilling fibre reinforcement heavy duty designer cement concrete tiles for steps and dado of approved colour and design 22 +/- 2 mm thick bayer colour pigmented as per IS 1237 - 1980 reaffirmed in 2006 ,having wert transvrse strength of 3.5 / mm 2, water absorption less than 10 % abrasion / wear resistance less than 2 mm ,skid resistance more than 25.0 (ASTM:E303) and no fading as per DIN - 51094 in plan / designed pattern on a bed of 1:4 cement mortar including cement float ,filling joints with neat cement slurry ,curing,polished and cleaning etc. complete. For steps, and dado	As directed by Engineer-In-Charge	Square Metre	1129.00	397.00
1049	Paving Flooring and dado	33.78	BDM	Machine polishing to cement/marble mosaic tiled flooring or any other type of flooring including cleaning, washing, etc. complete.	As directed by Engineer in Charge	Square Metre	146.00	136.00
1050	Paving Flooring and dado	33.79	BDM	Hand polishing to dado, skirting including cleaning, washing etc. complete.	As directed by Engineer in Charge	Square Metre	72.00	68.00
1051	Paving Flooring and dado	33.80	BDM	Providing wax polishing to floors and dado, preparing the surface, scaffolding etc. complete.	As directed by Engineer in Charge	Square Metre	391.00	203.00
1052	Paving Flooring and dado	33.81	BDM	Providing and fixing in required position skirting or dado of polished Kotah Stone slab 25 mm to 30 mm thick fixed on base on plaster of cement mortar 1:4 including cement float, filling joints with cement slurry, curing rubbing, polishing and cleaning complete.	As directed by Engineer in Charge	Square Metre	1197.00	334.00

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1053	Wood Finish	34.01	BDN 1.1	Providing and applying boiled linseed oil in one coat, to the new wood work, including knotting, preparing the surface, scaffolding etc. complete as directed.	Bd. N. 1. 1 Page Number 399	Square Metre	24.00	16.00
1054	Wood Finish	34.02	BDN 1.1	Providing and applying boiled linseed oil in two coats to the new wood work, including knotting, preparing the surface, scaffolding etc. complete as directed.	Bd.N.1.1 Page Number 399	Square Metre	40.00	29.00
1055	Wood Finish	34.03	BDN 1.2	Providing and applying Wax polish to the new wood work including knotting, preparing the surface, scaffolding etc. complete as directed.	Bd.N.1.2 Page Number 399	Square Metre	51.00	44.00
1056	Wood Finish	34.04	BDN 1.2	Providing and applying Wax polish to the old wood work including knotting, preparing the surface, scaffolding etc. complete as directed.	Bd. N. 1.2 Page Number 399	Square Metre	41.00	28.00
1057	Wood Finish	34.05	BDN 1.3	Providing and applying French polish for required finish on previously polished wood including knotting, preparing the surfaces, scaffolding etc. complete as directed	Bd.N.1.3 Page Number 399	Square Metre	114.00	82.00
1058	Wood Finish	34.06	BDN 1.3	Providing and applying french polish to new wood work, for required finishing including. knotting, preparing the surfaces, scaffolding etc. complete as directed.	Bd.N.1.3 Page Number 399	Square Metre	224.00	177.00
1059	Wood Finish	34.07	BDN 1.4	Providing and applying varnish in one coat on previously varnished wood work including knotting, preparing the surface, scrapping, scaffolding, etc. complete.	Bd.N.1.4 Page Number 400	Square Metre	36.00	20.00
1060	Wood Finish	34.08	BDN 1.4	Providing and applying Varnish in two coats on new wood work including knotting, preparing the surface, scaffolding etc. Complete.	Bd.N.1.4 Page Number 400	Square Metre	57.00	29.00
1061	Wood Finish	34.09	BDN	Providing and applying melamine polish of required finish to the wood work by spray machine including knotting and preparing the even surface by scraping, applying French polish , scaffolding if required etc. complete. Note:The work to be executed on prior approval of Superintending Engineer will be necessary.	As directed by Engineer-in charge.	Square Metre	755.00	494.00
1062	Wood Finish	34.10	BDN	Providing and applying coal tar in one coat on previously coal tarred wood including preparing the surface, scaffolding etc. complete. (coal tar shall be minimum 300 grams per Square Metre.)	As directed by Engineer-in charge.	Square Metre	59.00	34.00
1063	Wood Finish	34.11	BDN	Providing and applying coal tar in two coats on new wood work including preparing the surface, scaffolding etc. complete. (coal tar shall be minimum 500 grams per Square Metre.)	As directed by Engineer-in charge.	Square Metre	93.00	51.00

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1064	Oil Painting	35.01	BDO 1	Providing and applying two coats of lead/zinc base oil paint/ bituminous paint of approved colour and shade to new wood work and fiber boards including preparing the surface, knotting, scaffolding if necessary, excluding primer coat etc. complete.	Bd.O. 1 Page Number 403	Square Metre	82.00	29.00
1065	Oil Painting	35.02	BDO 2	Providing and applying one coat of lead/zinc base oil paint/ bituminous paint of approved colour and shade to old wood work previously painted and fiber boards including if necessary scaffolding, preparing surface excluding primer coat etc. complete.	Bd.0.2 Page Number 404	Square Metre	43.00	15.00
1066	Oil Painting	35.03	BDO 2A	Providing and applying two coats of lead/zinc base oil paint/bituminous paint of approved colour and shade to old wood work and fiber boards previously painted including if necessary scaffolding, preparing the surface excluding priming coat etc. complete.	Bd.0.2 Page Number 404	Square Metre	67.00	29.00
1067	Oil Painting	35.04	BDO 3	Providing and applying two coats of lead/zinc base oil paint/ bituminous paint of approved colour to new structural steel work and iron work in buildings including scaffolding if necessary, cleaning and preparing the surface etc. complete. (excluding primer coat).	Bd.0.3 Page Number 404	Square Metre	82.00	32.00
1068	Oil Painting	35.05	BDO 4	Providing and applying one coat of aluminium paint of approved make to new structural steel work in building and workshop including scaffolding if necessary, cleaning and preparing surface (excluding primer coat) etc. complete.	Bd.O.4 Page Number 405	Square Metre	68.00	23.00
1069	Oil Painting	35.06	BDO 4A	Providing and applying 2 coats of alluminium paint of approved make to new structural steel work in buildings and workshops including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat)etc. complete.	Bd.0.4 Page Number 405	Square Metre	103.00	40.00
1070	Oil Painting	35.07	BDO 5	Providing and applying two coats of synthetic enamel paint of approved colour to new /old structural steel work and wood work in buildings, including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete.	Bd.O.5 Page Number 405	Square Metre	80.00	40.00
1071	Oil Painting	35.08	BDO 6	Providing and applying one coat of flat oil paint of approved colour to the old structural steel work and iron work previously painted in building including scaffolding, if necessary, cleaning and preparing surface (excluding primer coat) etc. complete.	Bd.0.6 Page Number 406	Square Metre	53.00	23.00
1072	Oil Painting	35.09	BDO 6A	Providing and applying two coats of flat oil paint of approved colour to the old structural steel work and iron work previously painted in building including scaffolding, if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete.	Bd.0.6 Page Number 406	Square Metre	78.00	43.00
1073	Oil Painting	35.10	BDO 7	Providing and applying one coat of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete.	Bd.0.7 Page Number 406	Square Metre	49.00	23.00

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1074	Oil Painting	35.11	0	Providing and applying two coats (exterior quality) of flat oil paint of approved colour and shade to the plastered surface in buildings and workshops including scaffolding if necessary, cleaning the surface and preparing surface etc. complete. (excluding primer coat)	As directed by Engineer- in-charge.	Square Metre	81.00	40.00
1075	Oil Painting	35.12	BDO 7A	Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete.	Bd.O.7 Page Number 406	Square Metre	93.00	40.00
1076	Oil Painting	35.13	BDO 8	Providing and applying two coats of water proof cement paint of approved manufacture and of approved colour to the plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	Bd.O.8 Page Number 406	Square Metre	72.00	47.00
1077	Oil Painting	35.14		Providing and applying two coats of water proof cement paint of approved manufacture and of approved colour to old plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	As directed by Engineer- in-charge.	Square Metre	73.00	47.00
1078	Oil Painting	35.15		Providing and applying three coats of water proof cement paint of approved manufacture and of approved colour to new plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	Spec.Number: Bd.O.8/Page Number406	Square Metre	95.00	62.00
1079	Oil Painting	35.16		Providing and applying three coats of water proof cement paint of approved manufacture and of approved colour to old plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	Spec.Number: Bd.O.8/Page Number406	Square Metre	88.00	62.00
1080	Oil Painting	35.18	BDO 8B	Removing old paint from steel and other metal surfaces and making the surfaces even with hand scrapping, scaffolding etc. complete.	As directed by Engineer in charge.	Square Metre	16.00	16.00
1081	Oil Painting	35.19	BDO 8C	Providing and applying priming coat over new wood and wood based surfaces, including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter, sand papering and knotting, scaffolding etc. complete.	As directed by Engineer in charge.	Square Metre	29.00	12.00
1082	Oil Painting	35.20	BDO 8D	Providing and applying priming coat over new/old steel and other metal surfaces including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and scoured with wire brushes, fine steel wool, scrappers and sand paper, scaffolding etc. complete.	As directed by En-gineer in charge.	Square Metre	32.00	17.00
1083	Oil Painting	35.21	BDO 8E	Providing and applying priming coat on concrete/ masonry/ Asbestos Cement plastered surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required etc. complete.	As directed by Engineer in charge.	Square Metre	34.00	11.00
1084	Oil Painting	35.22	BDO 8F	Providing and applying one coat of seal cement primer of approved manufacture and shed including scaffolding preparing the surface by cleaning dirt and other foreign matters, scrapping if necessary including scaffolding etc. complete.	As directed by Engineer in charge.	Square Metre	19.00	14.00

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1085	Oil Painting	35.23	BDO	Providing and applying pearl/ luster finish paint of approved colour and shade to the existing plaster surface including scaffolding, preparing the surface, applying the acrylic wall putti etc. complete.	As directed by Engineer in charge.	Square Metre	194.00	63.00
1086	Oil Painting	35.24	BDO	Providing and applying two coats of textured synthetic paint of approved shade and quality and one coat of primer before applying textured paint including scaffolding if necessary preparing surface by thoroughly cleaning oil, grease, dirt and other materials as required, etc. complete.	As directed by Engineer in charge.	Square Metre	147.00	25.00
1087	Oil Painting	35.25	BDO	Providing and applying two coats of exterior acryallic emulsion paint confirming to corresponding I.S. of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface, applying primer coat ,scaffolding if necessary , and watering the surface for two days etc complete.	As directed by Engineer in charge.	Square Metre	218.00	146.00
1088	Oil Painting	35.26	BDO	Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE: For Item Number 15 to 18 prior approval of Superintending Engineer will be necessary	As directed by Engineer in charge.	Square Metre	216.00	146.00
1089	Oil Painting	35.29	BDO	Providing and applying external raincoat painting with crack filling acrylic polymer based chemical compound coating to the external surface of walls to prevent water seepage in the masonry walls during monsoon added with required shade Steiner to give required shade to the surface in two coats. Including providing three coat of priming of polymer base primer including preparing surface scrapping the existing loose old paint, removing loose particles of sand on the surface opening and cleaning the cracks developed in the external plaster, removing loose particles by chiseling, filling cracks by chemicals compound of approved make with proper penetration etc. Coating of Raincoat with the help of brush and as per instructions and specification given by manufacturer and with instruction from Engineer in-charge. Work shall be executed by certified applicator only and covering gurantee of 3 years on court stamp paper of Rs. 500/- and necessary testing etc. complete.	As directed by Engineer in charge.	Square Metre	241.00	29.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1090	Colouring	36.02	BDP 1	Providing and applying white-wash in one coat on old / new plastered or masonry surfaces and asbestos cement sheets including scaffolding and preparing the surface by brushing and brooming down etc. complete.	Bd.P.1 Page Number 411	Square Metre	7.00	5.00
1091	Colouring	36.03	BDP 1A	Providing and applying white-wash in two coats on old / new plastered or masonry surfaces and asbestos cement sheets including scaffolding and preparing the surface by brushing and brooming down etc. complete.	Bd. P. I Page Number 411	Square Metre	10.00	7.00
1092	Colouring	36.04	BDP 2	Providing and applying colour-wash of approved colour and shade in one coat to new surface including scaffolding, brushing and brooming down (excluding base coats of white wash) etc. complete.	Bd. P.2 Page Number 412	Square Metre	8.00	6.00
1093	Colouring	36.05	BDP 2A	Providing and applying colour-wash of approved colour and shade in two coats to new surface including scaffolding, brushing and brooming down (excluding base coat of white-wash) etc. complete.	Bd.P.2 Page Number 412	<u>Square Metre</u>	16.00	10.00
1094	Colouring	36.06	BDP 3	Providing and applying colour-wash of approved colour and shade in one coat to old surfaces which are to be recoloured including scaffolding, brushing and brooming down. (excluding base coat of white wash) etc. complete.	Bd.P.3 Page Number 412	Square Metre	7.00	4.00
1095	Colouring	36.07	BDP 3A	Providing and applying colour-wash of approved colour and shade in two coats to old surfaces which are to be recoloured including scaffolding, brushing and brooming down. (excluding base coat of white-wash) etc. complete.	Bd.P.3 Page Number 412	Square Metre	14.00	10.00
1096	Colouring	36.08	BDP 4	Providing and applying washable powder distemper of approved colour and shade to old and new surfaces in one coat including scaffolding, preparing the surfaces (excluding the priming coat)etc. complete.	Bd.P.4 Page Number 413	Square Metre	17.00	6.00
1097	Colouring	36.09	BDP 4A	Providing and applying washable powder distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the primer coat) etc .complete.	Bd. P.4 Page Number 413	Square Metre	26.00	11.00
1098	Colouring	36.10	BDP 5	Providing and applying washable oil-bound distemper of approved colour and shade to old and new surfaces in one coat including scaffolding, preparing the surfaces. (excluding the primer coat.)etc. complete.	Bd. P.5 Page Number 413	Square Metre	29.00	12.00
1099	Colouring	36.11	BDP 5A	Providing and applying washable oil-bound distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the primer coat.) etc. complete.	Bd.P.5 Page Number 413	Square Metre	43.00	17.00
1100	Colouring	36.12	BDP 6	Providing and applying plastic emulsion paint of approved quality, colour and shade to old and new surfaces in two coats including scaffolding, preparing the surface. (excluding the primer coat)etc. complete.	Bd.P.6 Page Number 414	Square Metre	69.00	21.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1101	Colouring	36.13	BDP 6A	Providing and applying plastic emulsion paint of approved quality, colour and shade to old surface in three coats including scaffolding, preparing the surface. (excluding primer coat) etc. complete.	Bd.P.6 Page Number 414 and Pre-approval of Superintending Engineer	Square Metre	87.00	25.00
1102	Colouring	36.14	BDP 6A	Providing and applying plastic emulsion paint of approved quality, colour and shade to new surface in three coats including scaffolding, preparing the surface. (excluding primer coat) etc. complete.	Bd.P.6 Page Number 414 and Pre-approval of Superintending Engineer	Square Metre	99.00	37.00
1103	Colouring	36.15	BDP	Washing and cleaning of decorated wall surfaces with soap, soda and water etc. complete.	As directed by Engineer in charge.	Square Metre	3.00	3.00
1104	Colouring	36.16	BDP	Providing and applying plastic emulsion paint of approved quality, colour and shade to old and new surfaces in single coat including scaffolding, preparing the surface. (excluding the primer coat)etc. complete.	Bd.P.6 Page Number 414	Square Metre	52.00	13.00
1105	Colouring	36.19	BDP	Scrapping the old plastered internal surface with sand paper and coating the entire surface with mixture of whiting or glue and linseed oil including scaffolding etc. complete as directed.	As directed by Engineer in charge.	Square Metre	33.00	29.00
1106	Colouring	36.20	BDP	Providing and applying interior wall finish luster of approved make on internal wall surface as detailed below Scrapping the surface with emery paper and wipe clean wall primer with brush with mineral turpentine with brush 8 to 10% and oil 15 to 20% with roller and allowing to dry for a period 6 to 8 hours. wall putty with appropriate proportion of water allowing to dry for period 4 to 6 hours. Scrapping with Emery paper 180 and wipe clean. Applying wall primer with brush with mineral turpentine 8 to 10% and oil 15 to 20% with roller Scrapping Emery paper 320 and wipe clean, interior wall finish luster 1st coat with brush/rubber/spray with mineral turpentine 7 to 9% and Oil with roller 19 to 21% After 8 hours of activity Applying 2nd coat or wall finish Lustre with mineral turpentine 7 to 9 % with brush and Oil with roller 19 to 21% after allowing dry for the period of 6 to 8 hours activity. (With prior approval of S.E.)	As directed by Engineer in charge.	Square Metre	223.00	120.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1107	Colouring	36.21	BDP	Providing and applying Royale Luxury Emulsion of approved make on internal wall surface as detailed below Scrapping for surface with emery paper and wipe clean for area. wall primer with brush by adding mineral turpentine oil by 8 to 10 % or water by 15 to 20% allowing to dry for 6 to 8 hoursAfter applying Asian / Berger / Nerolac / Dulex Paints or equivalent acrylic wall putty with appropriate prpportion of water of allow to dry for period of 4 to 6 hours of activity. Scrapping with emery paper and wipe clean Applying paints Royale Luxury emulsion 1st coat with brush water content water 40 to 45% or 65 to 70% by role Applying paints Royale luxury emulsion 2nd coat with brush with water content 40 to 45 % or 65 to 70 % by roller. (With prior approval of S.E.)	As directed by Engineer in charge.	Square Metre	248.00	122.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1108	Wood Work	37.01	BDQ 1	Providing and fixing <u>Indian</u> teak wood planking 25 mm thick for flooring plained on both sides, tongued and grooved including scaffolding, if necessary, and one coat of primer etc. complete.	Bd.Q. 1 Page Number 419	Square Metre	2900.00	143.00
1109	Wood Work	37.02	BDQ 1A	Providing and fixing <u>Indian</u> teak wood planking 50 mm thick for flooring plained on both sides, tongued and grooved including scaffolding, if necessary, and one coat of primer etc. complete.	Bd.Q.1 Page Number 419	Square Metre	5668.00	114.00
1110	Wood Work	37.03	BDQ 2	Providing and fixing <u>Indian</u> teak wood joists and girders in timber floors of single, double or framed type including scaffolding if necessary, and one coat of primer etc. complete.	Bd.Q.2 Page Number 420	Cubic Metre	106961.00	1437.00
1111	Wood Work	37.04	BDQ 2A	Providing and fixing Jungle (hard) wood of approved species joists and girders in timber floor of single, double or framed type including scaffolding if necessary and one primer coat etc. complete.	Bd.Q.2 Page Number 420	Cubic Metre	56770.00	4840.00
1112	Wood Work	37.05	BDQ 3	Providing and fixing Indian teak wood plank ceiling 20 mm thick plain underside tongued and grooved including iron screws, scaffolding, if necessary, including one primer coat on under side and one coat of coal tar on upper side etc. complete.	Bd.Q.3 Page Number 421	Square Metre	2475.00	216.00
1113	Wood Work	37.06	BDQ 4	Providing and fixing Indian teak wood framed collar beam / king post / queen post truss, with all Iron work including scaffolding, if necessary, and one coat of primer etc. complete.	Bd.Q.4, Page Number 422	Cubic Metre	145216.00	33523.00
1114	Wood Work	37.07	BDQ 4A	Providing and fixing in teak wood framed collar beam / king post / queen post truss, with all iron work including scaffolding, if necessary and primer coat etc. complete.	Bd.Q.4, Page Number 422	Cubic Metre	83190.00	33523.00
1115	Wood Work	37.08	BDQ 5	Providing and fixing country teak wood common rafters, purlins and purlin cleats, hip rafters, jack rafters, ridges, wall plates, post plates and posts for roofing etc. including scaffolding, if necessary, all iron work and one coat of primer etc. complete.	Bd.Q.5, Page Number 423	Cubic Metre	130084.00	14374.00
1116	Wood Work	37.09	BDQ 5A	Providing and fixing teak wood common rafters, purlins and purlin cleats, hip rafters, jack rafters, ridges, wall plates, post plates and posts for roofing, etc. including scaffolding, if necessary all iron work and one coat of primer etc. complete.	Bd.Q.5, Page Number 423	Cubic Metre	67111.00	14374.00
1117	Wood Work	37.10	BDQ 8	Providing and fixing teak wood hand rail of 60 mm x 75 mm as per detailed drawings or as directed by the Engineer, including french polishing, etc. complete. (Note : The work to be executed on preapproval of Superintending Engineer).	Bd.Q.8, Page Number 425	Running Metre	1125.00	431.00
1118	Wood Work	37.11	0	Providing and fixing country teak wood two way trellis work with battens or laths 2.5 cm x 1.2 cm and 5 cm x 5 cm openings including frame of 8 cm x 5 cm vertical and horizontal scantlings and coat of primer etc. complete.	Bd/Q-6 P-424	Square Metre	1795.00	144.00
1119	Wood Work	37.12	0	Providing and fixing hard wood of approved species two way trellis work with battens or laths 2.5 cm x 1.2 cm and 5 cm x 5 cm openings including frame of 8 cm x 5 cm vertical and horizontal scantlings and coat of primer etc. complete.	Bd/Q-6 P-425	Square Metre	825.00	144.00

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1120	Wood Work	37.13	BDQ 18	Providing and fixing decorative teak plywood veneer lining 4 mm thick with backing of teak wood frame work of battens 12 mm X 25 mm at 30 cm center to center fixed to walls and pillars with 12 mm thick plywood building without skirting and cornice as per drawings including necessary iron work and finishing the exposed wood work with french polish etc. complete.	Bd.Q. 18 Page Number 431	Square Metre	1145.00	309.00
1121	Wood Work	37.14	0	Providing and fixing 20 mm thick superior veneer board pelmet box 150 to 200 mm wide to doors or window frames including 20mm dia. Aluminium curtain rod with sockets and finishing with french polishing (without top)etc. complete.	As directed by Engineer- in-charge.	Square Metre	3581.00	1959.00
1122	Wood Work	37.15	0	Providing and fixing 20 mm thick Laminated sheet board pelmet box 150 to 200mm wide to doors or window frames including 20 mm dia. Aluminium curtain rod with sockets and finishing with french polishing (without top) etc.complete.	As directed by Engineer- in-charge.	Square Metre	3261.00	1959.00
1123	Wood Work	37.16	BDQ 19	Providing and fixing <u>Indian</u> teak wood eaves boards 15 cm wide and 25 mm thick plain decorative type including scaffolding and painting with two coats etc. complete.	Bd.Q. 19 Page Number 432	Running Metre	600.00	144.00
1124	Wood Work	37.17	BDQ 19A	Providing and fixing seasoned and treated jungle wood of approved species eaves board 15 cm wide and 25 mm thick plain decorative type including scaffolding and painting with two coats etc. complete.	Bd.Q. 19 Page Number 432	Running Metre	418.00	155.00
1125	Wood Work	37.18	BDQ 20	Providing and fixing Teak wood eaves plate of size 10cm wide and 20 mm thick including scaffolding and painting in two coats etc. complete.	Bd.Q.20 Page Number 432	Running Metre	316.00	86.00
1126	Wood Work	37.19	BDQ 21	Providing and fixing country teak wood barge board 22 cm wide and 20mm thick plain type including scaffolding and painting in two coats etc. complete.	Bd.Q.21 Page Number 433	Running Metre	657.00	144.00
1127	Wood Work	37.20	BDQ 21A	Providing and fixing seasoned and treated jungle wood of approved species barge board 22 cm wide and 20 mm thick plain type including scaffolding and painting in two coats etc. complete.	Bd.Q.21 Page Number 433	Running Metre	397.00	144.00
1128	Wood Work	37.21	BDQ	Providing and fixing shutter to wall cupboard made from 19 mm thick Teak particle board with approved coloured laminated face 1.5 mm thick bonded with phenol formaldehyde synthetic resin B.W.P. grade including lipping beading iron oxidised fixtures and fastening and oil primer coat etc. complete. (Excluding cupboard frame).	As directed by Engineer in charge.	Square Metre	3125.00	154.00
1129	Wood Work	37.22	BDQ	Providing and fixing Shutter to wall Cupboard consisting of Teak Wood styles and Rails 25 mm thick and 75 mm wide with panel insert of 12 mm thick particle Board with one approved coloured Laminated Face on one side 1.5 mm thick, bonded with Phenol Formaldehyde Synthetic Resin including Lipping Beading. Iron oxidised fixtures and fastening and oil primer coat etc. complete. (Excluding cupboard frame).	As directed by Engineer in charge.	Square Metre	3340.00	193.00

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1130	Wood Work	37.23	BDQ 22	Providing and fixing jungle wood ballies of approved species 85 mm average dia. for common rafters, purlins, ridges, hip and valley rafters, jack rafters, wall plates, post plates, posts etc. including all iron work scaffolding if necessary and oiling in one coat etc. complete.	Bd.Q.22/Page Number434	Running Metre	441.00	146.00
1131	Wood Work	37.24	BDQ 23	Providing and fixing 100 mm dia. Country teak wood ballies for post truss of 6.00 m. span as per drawing or as directed by Engineerin-charge including all iron work, scaffolding if necessary and oiling etc. complete.	Bd.Q.22/Page Number434	Running Metre	302.00	36.00
1132	Wood Work	37.25	3 BDN 12 B	Providing and applying Wax polishing to the old wood work including knotting, preparing the surface, scaffolding etc. complete as directed.	Bd.N.1.2/Page Number399	Square Metre	51.00	37.00
1133	Wood Work	37.26	BDQ	Providing and fixing 3.5 to 4 mm thick Veneer finish wall Panaling made out of 50 x 25 mm (finished size) C.C.T.W. frame work or size of 600 x 600 mm center or as per site condition covered by 6 mm thick marine plywood of the generally confirming to I:S 710-1980 finished with 3.5 to 4 mm thick matching Veneer of approved color and in satin walnut groov matched veneer pattern and design including melamine polishing & design with antitermite treatment etc. to plywood and woodwork with ten years guarantee bond etc. including all lead and lifts complete as per Architects Drawing and instructions of Engineer Incharge.	As directed by Engineer in charge.	Square Metre	4292.00	2130.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1134	Roofing and Ceiling	38.01	BDR 1	Providing and fixing Mangalore tiled roofing with class 'AA' tiles including securing the last course of tiles near the eaves with steel flat 40 mm x 3 mm and 1.22 mm wire fixing 50 mm x 25 mm horizontal teak wood battens and iron works and oiling the battens etc. complete. (Excluding ridge and hip tiles).	Bd.R.1, Page Number 449	Square Metre	1021.00	136.00
1135	Roofing and Ceiling	38.02	BDR 2	Providing and fixing Mangalore tiled roofing with class 'AA' tiles including securing the last course of tiles near the eaves with steel flat 40 mm x 3 mm and 1.22 mm wire fixing country teak wood sloping battens of 25 x 12 mm teak wood horizontal battens of 50mm x 25mm over the slopping battens, all iron work and coal tarring the battens etc. complete (Excluding ridge and hip tiles).	Bd.R.2, Page Number 450	Square Metre	1038.00	143.00
1136	Roofing and Ceiling	38.03	BDR 3	Providing and fixing Mangalore tile ridge and hip tiles of class 'AA' including scaffolding if necessary, pointing with coloured cement mortar and curing etc. complete.	Bd.R.3, Page Number 450	Running Metre	268.00	144.00
1137	Roofing and Ceiling	38.04	BDR 5	Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles including fastening with galvanised iron screws and bolts, lead and bitumen washers as per drawing etc. complete.(Weight of 5.5 Kilogram/sq.m.).	Bd.R.5, Page Number 453	Square Metre	777.00	107.00
1138	Roofing and Ceiling	38.05	BDR 5	Providing and fixing plain zinc sheeting of 0.80 mm thick (22 B.W.G.) over the ridge hip or valley to galvanized iron sheet roofing including all fastening and bolt galvanised iron screws and bolts, lead and bitumen washers etc. complete.(Weight of 6.8 Kilogram/sq.m.).	Bd.R.5, Page Number 453	Square Metre	1033.00	131.00
1139	Roofing and Ceiling	38.06	BDR 7	Providing and fixing 6.00 mm thick ISI mark Asbestos Cement Corrugated sheet roofing including galvanised iron 'J' or 'L' hook bolts galvanised iron band bituminous G.I. washers, galvanised iron clamps, bolts, nuts and scaffolding etc. complete.	Bd. R.7, Page Number 453	Square Metre	383.00	180.00
1140	Roofing and Ceiling	38.07	BDR 9	Providing and fixing 6 mm thick ISI mark Asbestos Cement ridge capping for roofing including galvanised iron hooks, bolts, galvanised iron and bituminous washers, galvanised iron clamps, bolts, nuts including scaffolding etc. complete.	Bd.R.9, Page Number 455	Running Metre	561.00	192.00
1141	Roofing and Ceiling	38.08	BDR 10	Providing and fixing valley gutter of 22 B.W.G. (0.8 mm) plain galvanised iron sheets 120 cm wide with teak wood planking 20 mm thick including two coats of coal-tarring the upper surface of plank etc. complete. (excluding painting to underside of plank).	Bd. R. 10, Page Number 455	Running Metre	2562.00	408.00
1142	Roofing and Ceiling	38.09	BDR 10A	Providing and fixing valley gutter of 22 B.W.G. (0.8 mm) plain galvanised iron sheets 90 cm wide with teak wood planking 20 mm thick including two coats of coal-tarring the upper surface of plank etc. complete. (excluding painting to underside of plank).	Bd. R. 10, Page Number 455	Running Metre	1947.00	438.00
1143	Roofing and Ceiling	38.10	BDR 10B	Providing and fixing valley gutter of 24 B.W.G. (0.63 mm) thick G.I. sheet 120 cm wide with 20 mm thick teak wood planking underneath coal tarring etc. complete.	Bd. R. 10, Page Number 455	Running Metre	2327.00	292.00
1144	Roofing and Ceiling	38.11	BDR 11	Providing and fixing glass tiles of Mangalore type at required places in Mangalore tile roof including scaffolding if necessary etc. complete.	Bd. R. 11, Page Number 456	Number	589.00	69.00

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1145	Roofing and Ceiling	38.12	BDR 13	Providing and fixing Mangalore pattern cowl ventilator tiles in the required places in a Mangalore tiled roof including scaffolding if necessary etc. complete.	Bd. R. 13, Page Number 459	Number	343.00	41.00
1146	Roofing and Ceiling	38.13	BDR 16	Providing and fixing false ceiling of plain asbestos cement sheets 4 mm thick with teak wood beadings 45 x 12 mm with frame work of teak wood battens of size 70 x 60 mm at 1.00 M center to center including scaffolding, if necessary, all iron work and painting (visible surfaces) to A.C. sheet and beading in two coats etc. complete. (excluding T.W. runner to be paid separately).	Bd.R.16, Page Number 460	Square Metre	1632.00	224.00
1147	Roofing and Ceiling	38.14	BDR	Providing and fixing frame work of anodised aluminium sections for suspended false ceiling consisting of aluminium T 50 mm x 40 mm weighing 0.39 Kilogram/m. at 60 cms c/c and fixed with (15 x 15 mm) flanges weighing 0.119 Kilogram/m suspended on 6 mm dia. mild steel rod weighing 0.22 Kilogram/m fixed on wall and beams including rounding of the edges with aluminium T of 50 mm x 40 mm weighing 0.39 Kilogram/m etc. including all labour etc. complete.	As directed by Engineer in charge.	Square Metre	1134.00	729.00
1148	Roofing and Ceiling	38.15	BDR	Providing and fixing frame work of galvanised iron for suspended false ceiling which includes galvanised iron perimeter channels of size 27 mm and 0.5 mm thick having one flange of 20 mm and another of 30 mm along with perimeter of the ceiling, fixing in brick wall / partition with the help of rawal plugs and screws, suspending galvenised iron intermediate channels of size 45 mm and 0.9 mm thick with two flanges of 15 mm each from the soffit at 1200 mm centers with steel galvanised iron hanger of width 25 mm x 0.5 mm fasteners, ceiling section of 0.5 mm thickness having curved wedge of 51.5 mm and two flanges of 26 mm each with lips of 10.5 mm fixed to the intermediate channel with the help of connecting clips and in direction perpendicular to the intermediate channel at 450 mm centers, 12.5 mm dry walls screws at 230 mm centers; fixing screws mechanically either with screw driver or drilling machine with suitable attachment etc. complete.	As directed by Engineer in charge.	Square Metre	1077.00	740.00
1149	Roofing and Ceiling	38.16	BDR 17	Providing and fixing false ceiling of teak wood particle board half perforated sheet 12 mm thick including scaffolding, if necessary, all iron work and two coats of oil painting to boards and beading i.e. visible surface etc. complete. (excluding frame work and runners)	Bd. R. 17 Page Number 461	Square Metre	896.00	300.00
1150	Roofing and Ceiling	38.17	BDR	Providing and fixing false ceiling of 10 to 12 mm thick decorative boards of fibrous plaster of paris including scaffolding if necessary all architectural work like mouldings, cornices, coves, domes, cups as per detailed drawings and three coats of spray painting to boards etc. complete. (excluding frame work, runners and mild steel suspenders).	As directed by Engineer in charge.	Square Metre	1090.00	438.00

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1151	Roofing and Ceiling	38.18	BDR 19	Providing and fixing false ceiling of 12mm thick as per drawings including powder coated G.I. wall angle of 20mm x 20mm size, G.I. grid runners of size 20mm x 38mm at 600mm center to center both ways and suspended using G.I. 3mm wire including fixing using butterfly clips and fasteners including transporting, scaffolding all necessary labour and machinery, finishing etc. complete.	Bd. R. 19 Page Number 462	Square Metre	1381.00	656.00
1152	Roofing and Ceiling	38.19	BDR	Providing and fixing false ceiling of 15mm thick as per drawings including powder coated G.I. wall angle of 20 mm x 20 mm x 0.60 mm size, G.I. grid runners of size 15 mm x 38 mm at 600 mm center to center both ways and suspended using G.I. 3 mm wire including fixing using butterfly clips and fasteners including transporting, scaffolding all necessary labour and machinery, finishing etc. complete.	As directed by Engineer in charge.	Square Metre	1564.00	720.00
1153	Roofing and Ceiling	38.20	BDR 17	Providing and fixing false ceiling of T.W. partical board half perforated sheets 12 mm thick with frame work of M.S. angle 40 x 40 x 5 mm and T of size 40 x 40 x 6 mm at 60 cm center to center including 12 mm dia. hangers, T.W. battens 50 x 25 mm and beading 25 x 15 mm thick scaffolding, if necessary, all iron work and two coats of painting to boards and beading i.e. visible surface etc. complete.	Bd. R. 17, Page Number 461	Square Metre	1389.00	324.00
1154	Roofing and Ceiling	38.21	BDR 17	Providing and fixing False ceiling of 12 mm thick Laminated board with frame of M.S. angle 40 x 40 x 5 mm and Tee of size 40 x 40 x 6mm at 60 cm c/c including 12 mm dia. hangers, T.W. battens 50 x 25 mm and beading 25 x 15 mm thick scaffolding if necessary, all Iron work etc. complete.	Bd. R. 17, Page Number 461	Square Metre	1991.00	324.00
1155	Roofing and Ceiling	38.22	BDR	Providing and applying two coats of bitumen to roof on new dungaree cloth one coat on each side etc. complete as directed.	As directed by Engineer in charge.	Square Metre	140.00	48.00
1156	Roofing and Ceiling	38.23	BDR	Providing and applying one coat of bitumen to roof (without cloth) including scaffolding etc. complete as directed.	As directed by Engineer in charge.	Square Metre	44.00	35.00
1157	Roofing and Ceiling	38.24	BDR	Removing and resetting Mangalore tiles from roof including refixing loose battens etc. complete.	As directed by Engineer in charge.	Square Metre	88.00	86.00
1158	Roofing and Ceiling	38.25	BDR	Removing the tiles, battens and dungry cloth purlins, rafters and ridges etc. from roof, sorting out the serviceable and unserviceable materials and stacking the same as and where directed in the compound, scaffolding etc. complete.	As directed by Engineer in charge	Square Metre	66.00	66.00
1159	Roofing and Ceiling	38.26	BDR	Removing G.I. or A.C. sheet roofing including purlins, principal rafters etc. including sorting serviceable and unserviceable materials, stacking the same as and where directed in the compound including scaffolding etc. complete.	As directed by Engineer in charge.	Square Metre	82.00	82.00
1160	Roofing and Ceiling	38.27	BDR	Removing and lowering the roof truss carefully without damaging the members and stacking as and where directed in the compound including scaffolding etc. complete.	As directed by Engineer in charge.	Number	706.00	706.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1161	Roofing and Ceiling	38.28	BDR	Removing R.S. girders of any size and span lowering the same and stacking neatly wherever directed in the compound scaffolding etc. complete.	As directed by Engineer in charge.	Metric Tonne	2198.00	2198.00
1162	Roofing and Ceiling	38.29	BDR	Providing fixing <u>country</u> teak wood battens 50 mm x 25 mm for Mangalore tile roof work with all iron work scaffolding and oiling the battens etc. complete.	As directed by Engineer in charge.	Running Metre	103.00	18.00
1163	Roofing and Ceiling	38.30	BDR	Providing fixing teak wood battens 25 mm x 12 mm for Mangalore tile roof work with iron work scaffolding and oiling the battens etc. complete.	As directed by Engineer in charge.	Running Metre	44.00	23.00
1164	Roofing and Ceiling	38.31	BDR	Providing and fixing sky light in R.C.C. roof including frame made of M.S. angle 50 x 50 x 6 mm with hold fast, sheet glass <u>12 mm</u> thick, Chicken mesh 24 gauge with all accessories and required fixtures and fastening fitting including painting etc. complete.	As directed by Engineer in charge.	Square Metre	1145.00	114.00
1165	Roofing and Ceiling	38.32	BDR	Providing and fixing 12 mm dia. mild steel bar upto 0.5 M. length for anchor rods with necessary threading nuts and bolts etc. complete.	As directed by Engineer in charge.	Number	120.00	100.00
1166	Roofing and Ceiling	38.33	BDR 3	Providing fixing Mangalore tile roofing with class AA tiles in cement mortar 1:4 on sloping slab including necessary scaffolding, curing, finishing, etc. complete.	Bd. R. 3A., Page Number 449	Square Metre	919.00	421.00
1167	Roofing and Ceiling	38.34	BDR	Providing and fixing colour coated Zinalume (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min.550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 um, comprising of nominal 25 um exterior coat on top surface and nominal 10 um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with subtle square fluting in the five pan at nominal 180-250 mm center-to-center. The end rib shall be designed for anti-capillary groove. and return leg. The feed material should have coil manufacturers product details marked a regular interval. Including fasteners with min. fastened with min. 25 um Zinc-Tin alloy coated, Hex head, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram/Square Metre)	As directed by Engineer in charge.	Square Metre	1042	109

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1168	Roofing and Ceiling	38.35	BDR	Providing and fixing of colour coated Zincaluminium(R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min.550 MPa yield strength, metallic hot dip coated withAluminium-Zinc alloy (55% aluminiumm 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 mm, comprising of nominal 25mmexterior coat on top surface and nominal 10 um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with sublet square fluting in the five pan at nominal 180-250 mmcenter-to-center. The end rib shall be designed for anti-capacity groove. and return leg. The feed material should have coil manufacturers product details marked a regular interval. including fasteners with min. fastened with min. 25 um Zinc-Tin alloy coated, Hex head, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram/Square Metre) 600 mm girth (Surface Width).	As directed by Engineer in charge.	Running Meter	668	65
1169	Roofing and Ceiling	38.36	BDR	Providing and fixing of colour coated Zinc aluminium (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min.550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminiumm 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 um, comprising of nominal 25um exterior coat on top surface and nominal 10 um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with subtle square fluting in the five pan at nominal 180-250 mm center-to-center. The end rib shall be designed for anti-capacity groove. and return leg. The feed material should have coil manufacturers product details marked a regular interval. including fasteners with min. fastened with min. 25 um Zinc-Tin alloy coated, Hex head, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram/Square Metre) 900 mm girth (Surface Width).	As directed by Engineer in charge.	Running Meter	948	98
1170	Roofing and Ceiling	38.37	BDR	Providing and fixing UPVC Roof made up of 3 layers roofing material of thickness 2mm having width of 1130 mm and of required Length having Tensile strength not less than 330 Kilogram/cm2, including fastening with self drilling screw having washers made of stainless steel etc. complete.	As directed by Engineer in charge.	Square Metre	1396.00	107.00
1171	Roofing and Ceiling	38.38	BDR	Providing and fixing PVC coloured Ridge tiles over UPVC roofing where required having size 113cm x 41cm for ridge including fastening with self drilling screw having washers made of stainless steel etc. complete.	As directed by Engineer in charge.	Running Metre	1178.00	64.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1172	Roofing and Ceiling	38.39	BDR	Providing and fixing 15 mm thick eco-friendly densified edge calcium silicate false ceiling of approved texture spintone/cosmos/hexa or equivalent of size 595mm x 595mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections (galvanising at @12 gm/sq.m including both sides)consisting of main T runner suitably spaced at joints to get required length and size 24X38mm. made from 0.33mm thick(minimum) sheet, spaced 1200mm center to center and cross T of size 24X28mm made of 0.33mm thick(minimum) sheet to be interlocked at the middle of the 1200x600 mm panel to form the grid of size 600x600mm resting on periphery walls/partitions on a perimeter wall angle precoated steel of size 24x24x3000 made of 0.4 mm thick (minimum) sheet with the help of all plugs at 450mm and laying 15 mm thick densified edges calcium silicate ceiling tiles of approved texture (spintone/cosmos/hexa) in the grid, including light fittings , fixtures , smoke detectors etc., wherever required. Main T runners suspended from ceiling with using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling using 12.5mm dia. And 50mm long dash fasteners, 4mm G.I. adjustable rods with galvanized steel levels clips of size 85x30x0.8mm, spaced at 1200mm center to center along main T bottom exposed with 24mm of all T-sections shall be prepainted with polyester baked paint, for all heights, as per specifications, drawings etc. complete.(currently this item should be used only for VIP cabins)	As directed by Engineer in charge.	Square Metre	2030.00	373.00
1173	Roofing and Ceiling	38.40	BDR	Providing and fixing false ceiling with eco-friendly light-weight calcium silicate tiles of spintone surface texture aerolite make or equivalent of size 595mm x 595mm having 15mm thick densified micro look edge and 100% humidity resistance incombustible as per BS 46part IV and thermal conductivity 0.043 w/m 0 KC and NRC 0.50 placed in true horizontal level suspended grid of size 600x600mm made from hot dipped G.I. steel sections ion silhouette profile, rotary stitched double webbed white with 6mm reveal profile (white/black), wherein, main T runner of size 42mmx14mm between main tee 600mm center-to-center and secondary cross T of size 33x14x0.43mm thick of length 600mm long spaced inter-locked at middle of the first crossed T in each panel to form grid of 1200mmx600mm resting on periphery wall Profile wall section 19mm (7+7) x 19mmx0.40thicknesses and laying false ceiling for services like diffusers grills including cutting, making opening for light fittings, fixtures, , smoke detectors etc., wherever required. Main T runners suspended from ceiling with using G.I. soffit cleats of size 25x35x1.6 mm of required length fixed to the ceiling with 6mm dia and 50mm long dash fastener, 4mm dia G.I. adjustable rods with powder-coated/good quality G.I. level adjustment clips of 35x35x0.8mm spaced @1200, center-to-center along main T all complete at all heights as per the specifications, drawings and as per	As directed by Engineer in charge.	Square Metre	2202.00	374.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1174	Roofing and Ceiling	38.41	BDR	Providing and fixing self supporting steel roofing system for a Godown or alike made up of structural grade steel sheet of 912 millimeter width (tolerance +/- 2 millimeter), moulded at site using mechanical press dies to the desired curve and shape to form 605 millimeter wide interlocking panels . The interlocking panels shall be pressed to close the seam forming water tight joints for a span of 15.30 meter having arch rise as 3.06 meter, arch length 17.75 meter. The base material made up of imported galvalume steel complying to ASTM A792 having base metal thickness of 0.80 millimeter (tolerace + / - 0.02 millimeter) with alloy coating AZ 150 and paint coating of regular modified polyster , top coat 25 micron and bottom coat 12 micron as per approved colour , including fixing hangers , clamps etc.as may be necessary of Proflex standard, including fixing sky light of 2 millimeter thick polycarbonate sheet of size 2' x 7' and turbo ventilator of 24" diameter to be installed at every 30 feet along the length of roof including finishing, testing and cleaning etc. complete.	As directed by Engineer in charge.	Square Metre	1982.00	365.00
1175	Roofing and Ceiling	38.42	BDR	Providing and fixing self supporting steel roofing system for a Godown or alike made up of structural grade steel sheet of 912 millimeter width (tolerance + / - 2 millimeter), moulded at site using mechanical press dies to the desired curve and shape to form 605 millimeter wide interlocking panels . The interlocking panels shall be pressed to close the seam forming water tight joints for a span of 21.30 meter having arch rise as 4.26 meter, arch length 25.13 meter. The base material made up of imported galvalume steel complying to ASTM A792 having base metal thickness of 1.00 millimeter (tolerace + / - 0.02 millimeter) with alloy coating AZ 150 and paint coating of regular modified polyster , top coat 25 micron and bottom coat 12 micron as per approved colour , including fixing hangers , clamps etc.as may be necessary of Proflex standard, including fixing sky light of 2 millimeter thick polycarbonate sheet of size 2' x 14' and turbo ventilator of 24" diameter to be installed at every 30 feet along the length of roof including finishing , testing and cleaning etc. complete.	As directed by Engineer in charge.	Square Metre	2061.00	365.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1176	Roofing and Ceiling	38.43	BDR	Providing and fixing self supporting steel roofing system for a Godown or alike made up of structural grade steel sheet of 912 millimeter width (tolerance + / - 2 millimeter), moulded at site using mechanical press dies to the desired curve and shape to form 605 millimeter wide interlocking panels . The interlocking panels shall be pressed to close the seam forming water tight joints for a span of 25.00 meter having arch rise as 5.00 meter, arch length 29.00 meter The base material made up of imported galvalume steel complying to ASTM A792 having base metal thickness of 1.20 millimeter (tolerace + / - 0.02 millimeter) with alloy coating AZ 150 and paint coating of regular modified polyster , top coat 25 micron and bottom coat 12 micron as per approved colour , including fixing hangers , clamps etc.as may be necessary of Proflex standard, including fixing sky light of 2 millimeter thick polycarbonate sheet of size 2' x 14' and turbo ventilator of 24" diameter to be installed at every 30 feet along the length of roof including finishing , testing and cleaning etc. complete.	As directed by Engineer in charge.	Square Metre	2176.00	365.00
1177	Roofing and Ceiling	38.44	BDR	Providing and fixing self supporting steel roofing system for a Godown or alike made up of structural grade steel sheet of 912 millimeter width (tolerance + / - 2 millimeter), moulded at site using mechanical press dies to the desired curve and shape to form 605 millimeter wide interlocking panels . The interlocking panels shall be pressed to close the seam forming water tight joints for a span of 28.75 meter having arch rise as 5.75 meter, arch length 33.92 meter. The base material made up of imported galvalume steel complying to ASTM A792 having base metal thickness of 1.40 millimeter (tolerace + / - 0.02 millimeter) with alloy coating AZ 150 and paint coating of regular modified polyster , top coat 25 micron and bottom coat 12 micron as perapproved colour , including fixing hangers , clamps etc.as may be necessary of Proflex standard, including fixing sky light of 2 millimeter thick polycarbonate sheet of size 2' x 14' and turbo ventilator of 24" diameter to be installed at every 30 feet along the length of roof including finishing , testing and cleaning etc. complete.	As directed by Engineer in charge.	Square Metre	2503.00	365.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1178	Roofing and Ceiling	38.45	BDR	Providing and Fixing of Mineral Fibre Board Acoustical Suspended Ceiling System with ultima (Bevelled Tegular) Edge Tiles of size 15mm Exposed GRID. The tiles should have Humidity Resistance (RH) of 99%, NRC 0.7, Light Reflectance 85%, Thermal Conductivity $k = 0.052 - 0.057$ w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 & 7) in module size of 600 x 600 x 20mm , suitable for Green Building application, with Recycled content of 32%. The tile shall be laid on precoated G.I.channel on XL2 Clip having a web height of 32 mm with 15 mm wide T - section flanges colour white having rotary stitching on all T sections i.e. the Main Runner, 1200 mm and 600 mm Cross Tees with a web height of 32 mm and a load carrying capacity of 7.7 Kilograms/M2 and minimum pull out strength of 100 Kilograms.. The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system. The Tile and Grid system used together should carry a 10 year warranty. products approved as per GRIHA and BS 476 etc. complete.	As directed by Engineer in charge.	Square Metre	1996.00	219.00
1179	Roofing and Ceiling	38.46	BDR	Providing and Fixing of Mineral Fibre Suspended Ceiling System with Bioguard (Bevelled Tegular) EDGE TILES WITH 15mm Exposed GRID. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance 90%, Thermal Conductivity $k = 0.052 - 0.057$ w/m K, Colour White, Fire Performance UK Class 0/Class 1 (BS 476 Part 6 and 7), in module size of 600x600 x 16mm with Anti Microbial coating on the face of the tile, suitable for Green Building application, with Recycled content of 34%. The tile shall be laid on precoated G.I. channel on XL2 Clip having a web height of 32 mm 32 with 15 mm wide T - section flanges colour white having rotary stitching on all T sections i.e. the Main Runner and 1200 mm Cross Tees with a web height of 32 mm and a load carrying capacity of 7.7 Kilograms/M2 and pull out strength of 100Kilograms. . The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system The Tile and Grid system used together should carry a 10 year warranty. products approved at GRIHA and BS 476 etc. complete.	As directed by Engineer in charge.	Square Metre	1786.00	219.00

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1180	Roofing and Ceiling	38.47	BDR	Providing and Fixing Soft Fibre Acoustical Suspended Ceiling System with Optra (Bevelled Tegular) Edge Tiles of size 15mm Exposed Grid. The tiles should have Humidity Resistance (RH) of 95%, NRC 0.9 - 1.0, Light Reflectance 85%, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 & 7) in module size of 600 x 600 x 15mm , suitable for Green Building application, with Recycled content of 66% GW and 74% RW. The tile shall be laid on precoated G.I channel 32 with 15 mm wide T - section flanges colour white having rotary stitching on all T sections i.e. the Main Runner, 1200 mm and 600 mm Cross Tees with a web height of 32 mm and a load carrying capacity of 7 Kilograms/M2 with a minimum pull out strength of 100 Kilograms. The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system The Tile and Grid system used together should carry a 10 year warranty. products approved as per GRIHA and BS 476 etc. complete.	As directed by Engineer in charge.	Square Metre	2519.00	190.00
1181	Roofing and Ceiling	38.48	BDR	Providing and Fixing of GI Lay in Plain metal ceiling consisting of 600x600mm Lay in tiles of pre coated galvanized steel in 0.5 mm thickness in Global white color tile to be laid on grid systems with 15mm wide T - section flanges color white having rotary stitching on the Main Runner, 1200 mm and 600 mm Cross Tees.Providing and Fixing of GI Lay in Plain metal ceiling consisting of 600x600mm Lay in tiles of pre coated galvanized steel in 0.5 mm thickness in Global white color tile to be laid on grid systems with 15mm wide T - section flanges color white having rotary stitching on the Main Runner, 1200 mm and 600 mm Cross Tees.products approved as per GRIHA and BS 476 etc. complete.	As directed by Engineer in charge.	Square Metre	1616.00	219.00
1182	Roofing and Ceiling	38.49	BDR	Providing and Fixing Mineral Fibre Acoustical Suspended Ceiling System with Dune (Bevelled Tegular) Edge Tiles of size 15mm Exposed Grid. The tiles should have Humidity Resistance (RH) of 99%,NRC 0.5, Light Reflectance 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 & 7) in module size of 600 x 600 x 16mm , with Recycled content of 35 %. The tile shall be laid on precoated G.I.channel height 32 with 15 mm wide T - section flanges colour white having rotary stitching and XL2 CLIP on all T sections i.e. the Main Runner, 1200 mm and 600 mm Cross Tees with a web height of 32mm and a load carrying capacity of 7.57 Kilograms/M2 and pull out strength of minimum 100 Kilograms.. The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system. The Tile and Grid system used together should carry a 10 year warranty.approved as per GRIHA and BS 476 etc. complete.	As directed by Engineer in charge.	Square Metre	1572.00	190.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1183	Roofing and Ceiling	38.50	BDR	Providing and Fixing Mineral Fibre Acoustical Suspended Ceiling System with Fine Fissured (Bevelled Tegular) Edge Tiles of size 15mm Exposed Grid. The tiles should have Humidity Resistance (RH) of 99%,NRC 0.6, Light Reflectance 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 &7) in module size of 600 x 600 x 16mm , with Recycled content of 31 %. The tile shall be laid on precoated G.I channel height of 32 with 15 mm wide T - section flanges colour white having rotary stitching and XL2 CLIP on all T sections i.e. the Main Runner, 1200 mm and 600 mm Cross Tees with a web height of 32mm and a load carrying capacity of 7.57 Kilograms/M2 and pull out strength of minimum 100 Kilograms.. The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system. The Tile and Grid system used together should carry a 10 year warranty. product approved in GRIHA and BS 476 etc. complete.	As directed by Engineer in charge.	Square Metre	1387.00	190.00
1184	Roofing and Ceiling	38.51	BDR	Providing and fixing in position Gypsum board false ceiling with 12.5 mm thick Gypsum boards, screwed/fixd to the under structure of suspended G.I. Grid constructed and suspended from the main ceiling consisting of ceiling sections of size 25 x 50 mm maximum center to center distance of 600 milimetre perimeter channel and intermediate channels at maximum center to center distance 1200 milimetre galvanized grid should be fixed to reinforced cement concrete slab. The gypsum board should be fixed to galvanized iron grid with necessary screws. The boards should be taped and filled from underside to give smooth, seamless ceiling. The rate should include necessary additional ceiling sections and intermediate channels. Additional intermediate channels should be fixed to strap hangers for additional support to prevent strapping at every 1200 milimetre item to be completed in all respect including necessary sleeves for ducts finishing of joints cut outs, painting including labour, material, lifts etc. all complete.	As directed by Engineer in charge.	Square Metre	1581.00	913.00
1185	Roofing and Ceiling	38.52	BDR	Providing and fixing Modular false ceiling of 600 x 600 mm center to center and 13 mm thick square mineral fiber board to be fixed on frame work of alluminium sections for suspended false ceiling consisting of alluminium T 2"x1 ½" (50 mm x 40 mm) weighing 0.39 Kilogram/m at 60 cms center center and fixed with ½" x ½" (15 x 15 mm) flanges weighing 0.19 Kilogram/m suspended on 6 mm dia mild steel rod weighing 0.22 Kilogram/m, fixed on wall and beams including rounding of the edges with alluinium T of 2" x 1 ½" (50 mm x 40 mm) weighing 0.39 Kilogram/m etc. (all alluminium sections shall be anodized) including all labour, material, lifts etc. complete.	As directed by Engineer in charge.	Square Metre	2155.00	810.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1186	Doors and Windows	39.01	BDT	Providing and fixing frame with / without ventilator of size as specified with Country cut teak wood for doors and windows including chamfering, rounding, rebating, iron holdfast of size 300mm x 40mm x 5mm with oil painting, etc. complete	As directed by Engineer in charge.	Cubic metre	174746.00	2130.00
1187	Doors and Windows	39.02	BDT	Providing and fixing frame with / without ventilator of size as specified with Country non teak wood for doors and windows including chamfering, rounding, rebating, iron holdfast of size 300mm x 40mm x 5mm with oil painting, etc. complete.	As directed by Engineer in charge.	Cubic metre	95519.00	124.00
1188	Doors and Windows	39.03	BDT-4	Providing and fixing the Country cut teak wood second class fully glazed openable fanlight rectangular in shape as per detailed drawing excluding the frame, stainless steel fixtures and fastenings and finishing the wood work with 3 coats of oil painting.	BD-T-4 Page Number 479	Square Metre	4484.00	1957.00
1189	Doors and Windows	39.04	BDT 7 and 8	Providing and fixing Country cut teak wood double or single leaf second class fully panelled door shutter with 35mm thick style and rail with 25 mm thick panels with openable fan light as per detailed drawings. Excluding the door frame 60mm x 100mm stainless steel fixtures and fastening and finishing the wood work with oil painting 3 coats. (Excluding the door frame)	BD-T-7 and 8 Page Number 481-82	Square Metre	8381.00	2612.00
1190	Doors and Windows	39.05	BDT-11	Providing and fixing Country cut teak wood single leaf panelled door shutter without fanlight and 25mm thick as per drawing consisting of T.W. top rail size 100mm x 25mm and bottom lock rail 200mm x 25mm insert panel 12 mm thick commercial ply faced T.W. particle board with phenol formaldehyde synthetic resin (Generally confirming to ISI 3097) excluding frame, including stainless steel fixture and fastening and T.W. beading to junctions of panelled inserts and as instructed by the Engineer in charge including 3 coats of oil painting etc. complete.	As directed by Engineer in charge.	Square Metre	5161.00	1579.00
1191	Doors and Windows	39.06	BDT-11	Providing and fixing single leaf panelled door shutter without fanlight and shutter 35 mm thick as per drawing consisting of T.W. top rail size 100mm x 35 mm and bottom and lock rail 200mm x 35mm insert panel 12 mm thick commercial ply faced T.W. particle board with phenol formaldehyde synthetic resin (Generally confirming to ISI 3097) excluding frame, including stainless steel fixtures fastening and T.W. beading at junction of panels inserts and as instructed by the Engineer in charge including 3 coats of oil painting etc. complete.	As directed by Engineer in charge.	Square Metre	7177.00	2235.00
1192	Doors and Windows	39.07	BDT-11	Providing and fixing single or double leaf panelled door shutter excluding frame with glazed openable fanlight shutter 35 mm thick as per detailed drawing consisting panelled vertical styles 100 mm x 35 mm and lock and bottom rail 200 mm x 35 mm and panels 12 mm thick both side commercial ply faced particle board including stainless steel fixtures and fastening and T.W. beading at junctions of panel inserts and as instructed by the Engineer in charge including 3 coats of oil painting etc. complete.	As directed by Engineer in charge.	Square Metre	6412.00	2359.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1193	Doors and Windows	39.08	BDT-12	Providing and fixing Country cut teak wood double or single leaf panelled shutters, 35 mm thick style top and freze rail 95 x 35 thick with lock and bottam rail 195 x 25 mm thick and panels without ventilator as per detailed drawing excluding the door frame, stainless steel fixtures and fastening and finishing the wood work with oil painting 3 coats complete	BD-T-11 and 12 Page Number 482-83	Square Metre	8324.00	2391.00
1194	Doors and Windows	39.09	BDT-34	Providing and fixing solid core flush door shutter in single leaf 32 mm thick decorative type of exterior grade as per detailed drawings approved face veneers 3 mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, and finishing with French Polish etc. complete.	BD-T-34 Page Number 499	Square Metre	2693.00	678.00
1195	Doors and Windows	39.10	BDT-36	Providing and fixing solid core flush door shutter commercial in single leaf 32 mm thick without ventilator commercial type of exterior grade as per detailed drawings with wrought iron hold fast, stainless steel fixtures and fastenings and handles on both sides and finishing with oil painting 3 coats complete.	BD-T-36 Page Number 500	Square Metre	2500	779
1196	Doors and Windows	39.11	BDT	Providing and fixing solid core flush door commercial type on single leaf 16 mm thick Bison Panel cement bonded particle Board including Teak wood lipping beading on all four edges without ventilator commercial type of exterior grade as per detailed drawings with wrought iron hold fast, stainless steel fixtures and fastenings and handles on both sides and finishing with oil painting three coats complete.	As directed by Engineer in charge.	Square Metre	3240	783
1197	Doors and Windows	39.12	BDT-39	Providing and fixing Country cut teak wood single leaf door shutter with teak wood style and rail of 25 mm thick including fixing 50 mm x 25 mm size welded mesh of 10 gauge as per detailed drawing or as directed with stainless steel fixture and fastening finishing with 3 coats of oil painting etc. complete.	BD-T-39 Page Number 500	Square Metre	4735	802
1198	Doors and Windows	39.13	BDT	Providing and fixing factory made panelled door shutter in single leaf 35 mm thick style and rail without ventilator with CCTW panels 12 mm thick including wrought iron hold fast and stainless steel fixtures with oil painting 3 coats etc. complete.	As directed by Engineer in charge.	Square Metre	2231	510
1199	Doors and Windows	39.14	BDT	Providing and fixing Country cut teak wood single leaf panelled door shutters 35 mm thick style and rail and 19 mm thick T.W. panels as per detailed drawing including wrought iron hold fast stainless steel fixtures and fastening and three coats of oil painting etc. complete.	As directed by Engineer in charge.	Square Metre	4168	659
1200	Doors and Windows	39.15	BDT-42	Providing and fixing fully glazed double leaf window shutter with openable fanlight including Country cut teak wood 25 mm thick style and rails with plain / obscured glass panels 5 mm thick as per drawing or as directed by the Engineer in charge with stainless steel fixtures and fastening and finishing the wood work with oil painting three coats etc. complete.	BD-T-42 Page Number 503	Square Metre	4123	1371

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1201	Doors and Windows	39.16	BDT-42	Providing and fixing Country cut teak wood window with double leaf half glazed and half panelled shutter with style 70 x 20 mm thick rails 95 x 20 mm thick and pannels 15mm thick with ventilator including wrought iron hold fast, stainless steel fixtures and fastenings and finishing the wood work with oil painting 3 coats etc. complete.	BD-T-42 Page Number 503	Square Metre	4769	1379
1202	Doors and Windows	39.17	BDT-43	Providing and fixing Country cut teak wood windows with double leaf 25 mm thick planked shutters without ventilators as per detailed drawings including stainless steel fixtures and fastenings and finishing the wood work with oil painting 3 coats etc. complete	BD-T-43 Page Number 503	Square Metre	5781	1040
1203	Doors and Windows	39.18	BDT-43	Providing and fixing Country cut teak wood windows / ventilators with double leaf panelled shutters 25 mm thick without ventilators as per detailed drawing including stainless steel fixtures and fastenings and finishing the wood work with oil painting 3 coats etc. complete.	BD-T-43 Page Number 503	Square Metre	6689	1157
1204	Doors and Windows	39.19	BDT-53	Providing and fixing steel window of various sizes as per detailed drawing without hot dip zinc coating, without ventilators, including fabricating / glazing with plain / obscured glass panels of approved type and quality, iron oxidised fixtures and fastenings, oil painting two coats complete.	BD-T-53 Page Number 509	Square Metre	3588	1327
1205	Doors and Windows	39.20	BDT-53	Providing and fixing steel window of various sizes as per detailed drawing without hot dip zinc coating, without ventilators, including fabricating / glazing with plain / obscured glass panels of approved type and quality, iron oxidised fixtures and fastenings, finishing with oil painting two coats complete (with guard bars 12 mm square at 10 cm c/c.)	BD-T-53 Page Number 509	Square Metre	3671	884
1206	Doors and Windows	39.21	BDT	Providing and fixing steel window C.R.C. sheet as per I.S. 1513 : 1986. gauge sect. 65 x 40 x 25 mm shutter single sheet of 24 gauge single leaf joined by fusion welding at appropriate points with vertical grooves of 15 mm wide and 15 mm deep at a distance of 45 mm. The first and last rib should be 60 mm away from vertical edge of the shutter. the shutter shall be welded, with angle to from the periphery of the shutter. At the center of the frame there shall be angle welded to bifurcate the frame into segments with two leaf shutter square 12 mm square guard bars at 120 mm center with all accessories	As directed by Engineer in charge.	Square Metre	3315	1255
1207	Doors and Windows	39.22	BDT	Providing and fixing in position factory made box type steel window with glazed fanlight including steel windows of cold rolled section of 105mm x 60mm x 1.25mm thick frame section filled with cement concrete (1:2:4) and metal pressed steel shutters of 20 gauge (1mm) as per detailed drawing and design or as directed including providing horizontal mild steel 12mm square bars at 10cm center to center, required F7B section, section 76, section 20mm x 5mm mild steel flat for shutter and F4B section for frame, 3mm thick glass of approved quality for fanlight necessary fixtures and fastening etc. complete finishing with one coat of anticorrosive paint etc.complete	As directed by Engineer in charge.	Square Metre	4356	952

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1208	Doors and Windows	39.23	BDT	Providing and fixing in position factory made box type fully glazed window consisting of cold rolled section of 105mm x 60mm x 1.25mm thick frame section filled with cement concrete (1:2:4) and steel section F4B as per detailed drawing and design including mild steel 12mm square bars at 10cm center to center, required F7B section, section T6, section for shutter frame (Louvered clips in case of Louvered window portion) and 3mm thick glass of approved quality of necessary fixtures and fastening, finishing with one coat of anticorrosive paint etc. complete .	As directed by Engineer in charge.	Square Metre	3910	952
1209	Doors and Windows	39.24	BDT-55	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 62481979) (Without mechanical gear)	BD-T-55 Page Number 510	Square Metre	4084	775
1210	Doors and Windows	39.25	BDT-55	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 62481979) (With mechanical gear)	BD-T-55 Page Number 510	Square Metre	4473	825
1211	Doors and Windows	39.26	BDT-57	Providing and fixing collapsible steel gate in one / two leaves with hot rolled vertical channels of 18 x 9 x 3 mm minimum size, crossings of M.S. flats of size 18 x 5 mm T or E section for runner of minimum 40 x 6 mm size for flange, M.S. flat for top runner of minimum size 40 x 12 mm with roller wheels conforming to grade F.G. 150 fitted with snap headed rivets of minimum size 6 mm max. spacing of vertical channels be 100 mm enclosed gate position and clear space of 150 mm between two sets of crossings with hold fasts, stoppers, spaces, handles, locking arrangement and one coat of red lead primer and oil painting etc. complete. (I.S. 105211983).	BD-T-57 Page Number 511	Square Metre	3066	995

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1212	Doors and Windows	39.27	BDT-67	Providing and fixing partition of welded mesh of 3 mm dia. wires 50 mm x 25 mm size mesh including integrated non teak seasoned wood frame 80 x 50 mm of vertical and horizontal scantling and finishing with oil painting 3 coats etc. complete	BD-T-67 Page Number 515	Square Metre	2332	798
1213	Doors and Windows	39.28	BDS	Providing and fixing sheet glass of 24 oz. for all size including putty etc. complete	BD-S Page Number 465 to 467	Square Metre	826	395
1214	Doors and Windows	39.29	BDT-53	Providing and fixing steel ventilator fully glazed partly fixed as per detailed drawing without hot dip zinc coating including fabricating glazing with plain / obscured glass panes 5 mm thick and approved type and quality and iron oxidized fixtures and fastening oil paint 2 coats etc. complete.	BD-T-53 Page Number 509 As directed by Engineer in charge.	Square Metre	2583	739
1215	Doors and Windows	39.30	BDT-53	Providing and fixing steel ventilator fully glazed partly fixed as per detailed drawing with hot dip zinc coating including fabricating glazing with plain / obscured glass pans 5 mm thick and approved type quality and iron oxidized fixtures and fastening with guard square bars 12 mm 10 cm c/c and oil painting 2 coats etc. complete.	BD-T-53 Page Number 509 As directed by Engineer in charge.	Square Metre	3767	1409
1216	Doors and Windows	39.31	BDT	Providing and fixing M.S. grill door 24 Kilogram/Square Metre of various size as per detailed drawings without hot dip coating, iron fixtures and fastenings and 3 coats of oil painting etc	As directed by Engineer in charge.	Square Metre	2576	1099
1217	Doors and Windows	39.32	BDT	Providing and fixing CCTW beading of size 40 mm x 20 mm to the door frame including chamfering finishing with 3 coats of oil painting etc. complete	As directed by Engineer in charge.	Running metre	160	50
1218	Doors and Windows	39.33	BDT	Providing and fixing steel frame of angle 50 x 50 x 6 mm size for window with 16 mm with mild steel bars horizontally at 10 cm c/c for ventilator portion and at 15 cm c/c for remaining portion with M.S. flat of size 40 x 6 mm vertical at center including iron hold fast boxes for fixing 40 x 6 mm vertical at center including iron hold fast boxes for fixing 40 x 6 mm vertical at center including iron hold fast boxes for fixing shutters including welding finishing painting etc. complete.	As directed by Engineer in charge.	Square Metre	2231	667
1219	Doors and Windows	39.34	BDT	Providing and fixing steel frame of angle 40 x 40 x 5 mm size for windows with 16 mm dia. mild steel bars horizontally at 10 cm c/c for ventilator portion and 15 cm c/c for remaining portion with M.S. flat of size 40 x 6 mm vertical at center including iron hold fast boxes for fixing 40 x 6 mm vertical at center including iron hold fast boxes for fixing shutters including welding finishing painting etc. complete.	As directed by Engineer in charge.	Square Metre	1795	723
1220	Doors and Windows	39.35	BDT	Providing and fixing steel frame door of angle 50 x 50 x 6 mm with mild steel bars 16 mm dia. horizontally at 10mm c/c for ventilator portion including iron hold fast boxes for fixing shutters including welding, finishing, painting etc. complete.	As directed by Engineer in charge.	Square Metre	1638	756

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1221	Doors and Windows	39.36	BDT	Providing and fixing steel frame door of angle 40 x 40 x 5 mm with 16 mm dia. mild steel bars horizontally at 10cm c/c for ventilator portion including iron hold fast for the fixing shutters including welding, painting, finishing etc. complete.	As directed by Engineer in charge.	Square Metre	1463	756
1222	Doors and Windows	39.37	BDT	Providing and fixing in position. (as per I.S.1868 / 1982) Aluminium sliding window of two tracks with rectangular pipe having overall dimension 63.50 x 38.10 x 1.02 mm at weight 0.547 Kilogram/Running metre. and window frame bottom track section 61.85 x 31.75 x 1.20 mm at weight 0.695 Kilogram/Running metre. Top and side track section 61.85 x 31.75 x 1.30 mm at weight 0.659 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. And handle section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass with all required screws and nuts etc, complete. With colour Anodising with box.	As directed by Engineer in charge.	Square Metre	5606	1098
1223	Doors and Windows	39.38	BDT	Providing and fixing in position. (as per I.S.1868 / 1982) Aluminium sliding window of two tracks with rectangular pipe having overall dimension 63.50 x 38.10 x 1.02 mm at weight 0.547 Kilogram/Running metre. and window frame bottom track section 61.85 x 31.75 x 1.20 mm at weight 0.695 Kilogram/Running metre. Top and side track section 61.85 x 31.75 x 1.30 mm at weight 0.659 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. And handle section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass with all required screws and nuts etc, complete. With colour Anodising without box	As directed by Engineer in charge.	Square Metre	5272	1098

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1224	Doors and Windows	39.39	BDT	Providing and fixing in position. (as per I.S.1868 / 1982) Aluminium sliding window of two tracks with rectangular pipe having overall dimension 63.50 x 38.10 x 1.02 mm at weight 0.547 Kilogram/Running metre. and window frame bottom track section 61.85 x 31.75 x 1.20 mm at weight 0.695 Kilogram/Running metre. Top and side track section 61.85 x 31.75 x 1.30 mm at weight 0.659 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. And handle section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass with all required screws and nuts etc, complete. With powder coating with box	As directed by Engineer in charge.	Square Metre	4794	1098
1225	Doors and Windows	39.40	BDT	Providing and fixing in position. (as per I.S.1868 / 1982) Aluminium sliding window of two tracks with rectangular pipe having overall dimension 63.50 x 38.10 x 1.02 mm at weight 0.547 Kilogram/Running metre. and window frame bottom track section 61.85 x 31.75 x 1.20 mm at weight 0.695 Kilogram/Running metre. Top and side track section 61.85 x 31.75 x 1.30 mm at weight 0.659 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. And handle section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass with all required screws and nuts etc, complete. With powder coating without box	As directed by Engineer in charge.	Square Metre	4769	1098

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1226	Doors and Windows	39.41	BDT	Providing and fixing in position (as per 1868 / 1982) Alluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram/Running metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram/Running metre.. Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. and handle and top section 40 x 18 x 1.25 mm at weight o.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineerincharge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc, complete. With colour Anodising with box	As directed by Engineer in charge.	Square Metre	5826	1318
1227	Doors and Windows	39.42	BDT	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram/Running metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram/Running metre.. Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. and handle and top section 40 x 18 x 1.25 mm at weight o.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineerincharge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc, complete. With colour Anodising without box	As directed by Engineer in charge.	Square Metre	5471	1318

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1228	Doors and Windows	39.43	BDT	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram/Running metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram/Running metre.. Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. and handle and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineerincharge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc, complete. With powder coating with box	As directed by Engineer in charge.	Square Metre	5157	1851
1229	Doors and Windows	39.44	BDT	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram/Running metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram/Running metre.. Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. and handle and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineerincharge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc, complete. With powder coating without box	As directed by Engineer in charge.	Square Metre	4864	1318

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1230	Doors and Windows	39.45	BDT	a) Supplying and fixing in position ----- Aluminium four track sliding windows with outer frame made from section of over all size 122 mm x 45 mm, bottom section with drain section track weighing 1.83Kilogramper metre and top and side section of size 122x 31.75 mm weighing 1.15Kilogramper running metre with shutter sections made of 18 mm x 40 mm size having average weight of 0.6Kilogramper running metre (or as required size) with change in proportionate weight, with 6 mm float glass in three equal panels and alluminium coated stainless steel mosquito net in one (2/3 of opening) panel fixed with new neoprene gasket, shutters to be provided with nylon encased stainless steel rollers, necessary locks and handles complete.				
1231		a		a) Colour anodized	As directed by Engineer in charge.	Square Metre	7062	1622
1232		b		b) Powder Coated	As directed by Engineer in charge.	Square Metre	6274	1622
1233	Doors and Windows	39.47	BDT	Providing and Fixing 30 MM thick BOTH SIDE PRELAMINATED SOLID PANEL PVC DOOR SHUTTER consisting of frame made out of M.S tubes of 19 guage thickness and, size 19 x 19 mm for styles and 15 x15 mm for the top and bottom rails, M.S frame shall have a coat of metel primer of approved make and manufacture. M.S frame shall be covered with heat moulded PVC 'C' channel made from 5 mm (+/0.25) thick prelaminated sheet of density 600 Kilogram/cbm ,of size 30mm thickness 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45° angle on either side forming stiles ; and 5 mm thick ,95 mm wide PVC sheet out of which 75 mm shall be falt and 20 mm shall be tapered in 45 on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be falt and 20 mm shall be tapered on both sides to form lock rail.Top,bottom and lock rail shall be provided either side of the panel. An additional 5 mm (+/0.25) thick PVC strip of 20 mm width is to be stuck on the bottom side of the ' c ' channel prelaminated paneling of 5 mm (+/0.25) thick PVC sheet to be fitted inside the M.S. frame welded/ sealed to the styles and rails with 5 mm (+/0.25) x 30 mm PVC sheet beading on either side and joined together with solvent cement adhesive etc ,10 mm thickness (5 mm (+/0.25) x 2 nos) 20 mm wide cross PVC sheet as gap insert for the rail and bottom rail. Door to be fixed to frames with 3 nos M.S.powder coated but hinges of size 100 mm x 25MM x 2mm using 32 mm long steel screws drilled suitable to pass through both the walls of the M.S tube. Other hardwares	As directed by Engineer in charge.	Square Metre	5567	953

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1234	Doors and Windows	39.48	BDT	Providing and fixing 34 mm thick moulded door shutter consisting of solid core single leaf flush door of 30 mm thickness lipped with 15 mm (5mm x 3) thick x 30 mm width on one style and top rail and 10 mm (5mm x 2) thick x 30 mm width on other style and bottom rails. The inner panels laminated with 2 mm thick termite proof, water proof and fire resistant moulded PVC sheet with 2,4,6 design in different plain and /or prelim colours on one side after routing the moulded design on flush doors and 2 mm plain and /or pre lam PVC on other side using rubber adhesive on flush door and solvent cement adhesive on the PVC lipping etc. as per direction of Engineer in charge and manufacturers specification and drawing etc. complete.	As directed by Engineer in charge.	Square Metre	6357	953
1235	Doors and Windows	39.49	BDT	Providing and fixing cold rolled steel hollow door frame 105mm x 60mm for any sizes including hold fast hinges, tie members with red oxide and gray paint etc. complete as per I.S.I. specifications and code of practice prescribed including anticorrosive treatment as directed by the engineer.	As directed by Engineer in charge.	Running Metre	1747	412
1236	Doors and Windows	39.50	BDT	Providing and fixing in position aluminium openable window of any size as per detailed drawing and as directed by Engineer in charge with all necessary aluminum sections including necessary fixtures and fastening with 5 mm thick clear float glass etc. complete. a) Without powder coating Note While arriving at the rate of item of item weight at 6.90 Kilogram/Square Metre is considered.	As directed by Engineer in charge.	Square Metre	4772	1700
1237	Doors and Windows	39.51	BDT	Providing and fixing in position ----- aluminium openable window of any size as per detailed drawing and as directed by Engineer in charge with all necessary alluminium sections including necessary fixtures and fastening with 5 mm thick clear float glass etc. complete.				
1238			a	a) Colour anodized	As directed by Engineer in charge.	Square Metre	5663	1700
1239			b	b) Powder Coated	As directed by Engineer in charge.	Square Metre	5069	1700
1240	Doors and Windows	39.52	BDT	Providing and fixing in position aluminium fixed window fully glazed of any size as per detailed drawing and as directed by Engineer in charge with all necessary alluminium sections including necessary fixtures and fastening such as 5 mm thick clear float glass etc. complete. a) Without powder coating. Note While arriving at the rate of item of item weight at 6.90 Kilogram/Square Metre is considered.	As directed by Engineer in charge.	Square Metre	4532	1360

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1241	Doors and Windows	39.53	BDT	Providing and fixing in position ----- aluminium fixed window fully glazed of any size as per detailed drawing and as directed by Engineerincharge with all necessary alluminium sections including necessary fixtures and fastening such as 5 mm thick clear float glass etc. complete.				
1242			a	a) Colour anodized	As directed by Engineer in charge.	Square Metre	5474	1360
1243			b	b) Powder Coated	As directed by Engineer in charge.	Square Metre	4846	1360
1244	Doors and Windows	39.54	BDT	Providing and fixing in position aluminium partly openable and partly fixed window of any size as per detailed drawing and as directed by Engineerincharge with all necessary alluminium sections including necessary fixtures and fastening with 5 mm thick float glass etc. complete. a) Without powder coating Note While arriving at the rate of item of item weight at 6.90 Kilogram/Square Metre is considered.	As directed by Engineer in charge.	Square Metre	5303	1700
1245	Doors and Windows	39.55	BDT	Providing and fixing in position aluminium partly openable and partly fixed window of any size as per detailed drawing and as directed by Engineerincharge with all necessary alluminium sections including necessary fixtures and fastening with 5 mm thick float glass etc. complete. b) With powder coating Note While arriving at the rate of item of item weight at 6.90 Kilogram/Square Metre is considered.	As directed by Engineer in charge.	Square Metre	5824	1700
1246	Doors and Windows	39.56	BDT	Providing and fixing M40 grade thick vibrated pull cast or similar type concrete frame with chamfer conforming to I.S. 65241983 having 6 mm dia. bars 3 Nos. And stirrups @250 mm c/c and fixing in wall with 6 Nos of hold fast of 12 mm dia bars 500 mm long including primer and oil painting etc, complete) frame size 60 mm x 100 mm .	As directed by Engineer in charge.	Running metre	832	379
1247	Doors and Windows	39.57	BDT	Providing and fixing M40 grade thick vibrated pull cast or similar type concrete frame with chamfer conforming to I.S. 65241983 having 6 mm dia bars 3 Nos. And strips @250 mm c/c and fixing in wall with 6 Nos. of hold fast of 12 mm dia bars 500 mm long including primer and oil painting etc, complete) frame size 60 mm x 125 mm	As directed by Engineer in charge.	Running metre	903	442
1248	Doors and Windows	39.58	BDT	Providing and fixing fiber glass reinforced polyster door shutter 30 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fastening with chromium plated handles on both sides, etc complete	As directed by Engineer in charge.	Square Metre	2797	636

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1249	Doors and Windows	39.59	BDT	Providing and fixing fiber glass reinforced polyster door shutter 35 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fastening with chromium plated handles on both sides, etc complete.	As directed by Engineer in charge.	Square Metre	2978	525
1250	Doors and Windows	39.60	BDT	Providing and fixing acrylic plastic sheet panels of approved quality in required thickness plain clear or any colour or obscured linings in lieu of glass pans to doors/windows including providing and fixing clips, putty etc. complete. (a) 2.00 mm thick.	As directed by Engineer in charge.	Square Metre	1378	564
1251	Doors and Windows	39.61	BDT	Providing and fixing acrylic plastic sheet panels of approved quality in required thickness plain clear or any colour or obscured linings in lieu of glass pans to doors/windows including providing and fixing clips, putty etc. complete. (b) 3.00 mm thick.	As directed by Engineer in charge.	Square Metre	1599.00	564.00
1252	Doors and Windows	39.62	BDT	Providing and fixing 24 gauge plain aluminium sheet on the face of door shutter including cutting to required size and fixing the screws including making good the damages if any to existing door shutter and frame etc. complete as directed or as per detailed drawing	As directed by Engineer in charge.	Square Metre	1024.00	477.00
1253	Doors and Windows	39.63	BDT	Providing and fixing in position, Double shuttered aluminium extruded powder coated openable door of specified size with aluminium door frame of powder coated section 101.60 x 44.75mm , 3.18 mm thick and shutter comprising of powder coated section having bottom and lock rail of size 150 mm x 44.5 mm x 3.00 mm thick top rails 47.62 x 44.45 mm x 3.00 mm thick , vertical style 47.62 x 44.45 mm, 3.00 mm thick and for shutter plain glass panes 5 mm thick for top panels and 12mm thick both side laminated phenol bonded particle board panels for bottom panels etc. , I.S.I. mark , heavy duty, Hydraulic floor spring of 150Kilogramcapacity , having heavy duty concealed lock, necessary beading, glazing clips, PVC gaskets, 250mm length aluminium tower bolts, 150mm dia. pad handle, etc. as per detailed design and drawing or as directed by engineer in charge including all materials , labours, and equipment etc.complete	As directed by Engineer in charge.	Square Metre	7828.00	1855.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1254	Doors and Windows	39.64	BDT	Providing and fixing in position, Single shuttered aluminium extruded powder coated openable door of overall size 0.90 m x 2.40 m with aluminium door frame of powder coated section 101.60 x 44.75mm , 3.18 mm thick and shutter comprising of powder coated section having bottom and lock rail of size 150 mm x 44.5 mm x 3.00 mm thick top rails 47.62 x 44.45 mm x 3.00 mm thick , vertical style 47.62 x 44.45 mm, 3.00 mm thick and for shutter plain glass panes 5 mm thick for top panels and 12mm thick both side laminated phenol bonded particle board panels for bottom panels etc. , I.S.I. mark , heavy duty, Hydraulic floor spring of 150Kilogramcapacity , having heavy duty concealed lock, necessary beading, glazing clips, PVC gaskets, 250mm length tower bolts, 150mm diam. pad handle, etc. as per detailed design and drawing or as directed by engineer in charge including all materials , labours, and equipment etc.Complete	As directed by Engineer in charge.	Square Metre	7258.00	2404.00
1255	Doors and Windows	39.65	BDT	Providing and fixing in position, Single shuttered aluminium extruded powder coated openable door of overall size 0.90 m x 2.40 m with aluminium door frame of powder coated section 101.60 x 44.75mm , 3.18 mm thick and shutter comprising of powder coated section having bottom and lock rail of size 150 mm x 44.5 mm x 3.00 mm thick top rails 47.62 x 44.45 mm x 3.00 mm thick , vertical style 47.62 x 44.45 mm, 3.00 mm thick and for shutter plain glass panes 5 mm thick for top panels and 12mm thick both side laminated phenol bonded particle board panels for bottom panels etc. , I.S.I. mark , with bijagiri having heavy duty concealed lock, necessary beading, glazing clips, PVC gaskets, 250mm length tower bolts, 150mm diam. pad handle, etc. as per detailed design and drawing or as directed by engineer in charge including all materials , labours, and equipment etc. complete	As directed by Engineer in charge.	Square Metre	8291.00	3729.00
1256	Doors and Windows	39.66	BDT	Providing and fixing 50 mm x 50 mm Mild Steel square pipe framed steel windows of various sizes as per details with welded square bars 12 mm at 10 cm center to center without hot dip zinc coating without / with ventilator including fabrication, glazing with plain / obscured glass panes 5 mm thick of approved type and quality, all fixtures and fastenings and finishing with one coat of primer complete.	As directed by Engineer in charge.	Square Metre	2686.00	1132.00
1257	Doors and Windows	39.68	BDT	Providing and fixing in position powder coated aluminium louvered windows / ventilator of various sizes with powder coating as per detailed drawing and specifications including aluminium frames 80 x 38 mm x 1.22 mm box type, 5 mm thick sheet glass louvers, of approved quality etc. complete.	As directed by Engineer in charge.	Square Metre	2841.00	1255.00
1258	Doors and Windows	39.69	BDT	Providing and fixing partitions made up of CCTW frame of size 75 mm x 50 mm at 60 cm c/c with 9 mm thick commercial ply and 4mm thick veneer on both sides with French polish etc. complete.	As directed by Engineer in charge.	Square Metre	4611.00	845.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1259	Doors and Windows	39.70	BDT	Providing and fixing Country cut teak wood partly veneered and partly glazed partition with 75 mm x 50 mm frame at 60 cm center and 9 mm thick commercial ply on both sides, decorative veneer of 4 mm thick and plain glass 5 mm thick, including French polishing etc. complete	As directed by Engineer in charge.	Square Metre	3075.00	738.00
1260	Doors and Windows	39.71	BDT	Providing and fixing welded mesh of 50 mm x 25 mm and (11 gauge) to Country cut teak wood frame work as per detailed drawing or as directed, iron fastening with one coat of primer, scaffolding, including TW frame work of 70 mm x 75 mm and covering CCTW battens of 45 mm x 10 mm etc. complete.	As directed by Engineer in charge.	Square Metre	1789.00	244.00
1261	Doors and Windows	39.72	BDT	Providing and fixing in position anodised extruded aluminum partitions, partly glazed and partly laminated having frame made out of extruded tubular section of size 40 mm x 60 mm with 12 mm thick three layered flat pressed teak wood particle board bonded with BWP type exterior grade phenol formaldehyde synthetic resin conforming to IS 128231990, laminated on both sides, Novateak or equivalent and 5 mm thick selected quality plain/ float glass panels fixed with aluminum glass clips 12 mm x 12 mm and rubber cushioning beading to glass partitions as per approved drawing etc. complete	As directed by Engineer in charge.	Square Metre	3023.00	950.00
1262	Doors and Windows	39.73	BDT	Providing and fixing in position extruded aluminium partitions having frame made out of extruded tubular section of size 65 mm x 40 mm with 12 mm thick three layered flat pressed teak wood particle board bonded with BWP type exterior grade phenol formaldehyde synthetic resin conforming to IS 129231990, laminated on both sides, Novateak or equivalent with aluminium glazing clips of size 12 mm x 12 mm (conical) as per drawing etc. complete.	As directed by Engineer in charge.	Square Metre	3299.00	1125.00
1263	Doors and Windows	39.74	BDT	Providing and fixing fly proof mesh shutter to ventilator / window using CCTW members of size 45 x 22 mm for frame work and 35 x 22 mm for middle support and fixing fly proof mesh on it and covering TW battens of size 20 x 10 mm including priming and two coats of oil painting to the new wood and steel work and all labour charges including all fixture and fastenings etc. complete	As directed by Engineer in charge.	Square Metre	3086.00	834.00
1264	Doors and Windows	39.75	BDT	Providing coloured anodising treatment to aluminium sections of the doors, windows, and ventilators including all the intermediate supports, side supports, screws and all the necessary fixtures with all leads, lifts, fixing charges etc. complete (Complete measurement on actual square meter basis of opening area shall be paid.)	As directed by Engineer in charge.	Square Metre	878.00	697.00
1265	Doors and Windows	39.76	BDT	Providing and fixing aluminium grill diamond mesh type DG202 of 7.5 mm thick including fixing in position anodised aluminium frame section of 80 x 38 mm x 1.22 mm size box, cutting to the required size with all wastage, labour, lead lift etc. complete.	As directed by Engineer in charge.	Square Metre	5123.00	1640.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1266	Doors and Windows	39.77	BDT	Providing and fixing in position Mild steel fixed staggered (Z Type) Ventilator as per detailed drawing with hot deep zink coating including fabricating with Mild steel 'Z 'Section of size 20mm x 25 mm and 3 mm thick at weight 1.42 Kilogram/Running metre,with stainless steel mosquito net of 304 Grade,4 mm thick float glass ?as directed by Engineer In charge including necessary welding, grinding, two coats of oil paint etc.complete	As directed by Engineer in charge.	Square Metre	3144.00	1045.00
1267	Doors and Windows	39.78	BDT	Providing and fixing in position anodised (as per IS 1868/1982) Aluminium fixed staggered (Z Type) Ventilator with aluminium rectangular pipe 63 mm x 38.10 mm x 1.22 mm at weight 0.650 Kilogram/Running metre, Aluminium angle of size 15 mm x 15 mm x 1 mm,aluminium channel of 9 mm sizes, S.S.mosquito net of 304 Grade,4 mm thick float glass per detailed drawing and as directed by Engineer in charge etc.complete.	As directed by Engineer in charge.	Square Metre	3161.00	1020.00
1268	Doors and Windows	39.79	BDT	Providing and fixing welded mesh of 11 gauge wires having mesh size 50 mm x 25 mm including M.S Angle frame of size 35 mm x 35 mm x5 mm in position with oil painting 3 coats etc. complete	As directed by Engineer in charge.	Square Metre	2130.00	993.00
1269	Doors and Windows	39.80	BDT	Providing and Fixing 32 mm thick One piece single moulded puff ABSTRONE BUTADYNE STYRINE (ABS) Door shutter for internal use including toilets made up of outer ABS sheet of 1.2 mm thick having puff insulation of 35 to 40 Kilogram/Cubic Metredensity and 10 mm dia.for steel bars 2 Nos., wooden block to receive fixtures, having M.S. hinges 100 mm length, M.S. handles 150 mm length and 10 mm dia sliding door bolt etc. complete	As directed by Engineer in charge.	Square Metre	4443.00	1739.00
1270	Doors and Windows	39.81	BDT	Providing and fixing 30mm thick SOLID PANEL PVC INTERNAL DOOR SHUTTER consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 40mm x 20mm for stiles ,top, lock and bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be covered with 5mm thick heat molded PVC channel of size 30 x 100mm forming stiles, and 5mm thick, 125mm wide PVC sheets for top rail, lock rail and bottom rail on either side, and 15mm (5mm x 3) thick, 20mm wide cross PVC sheet as gap insert for top rail and bottom rail. Paneling of 10 mm thick prelam PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles and rails with 30mm wide x 5mm thick PVC sheet beading on either side, and joined together with solvent cement adhesive etc. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the C Channel using PVC solvent cement adhesive. including stainless steel fixtures and fastening Complete as per direction of Engineerincharge,manufacturer'sspecification and drawing.	As directed by Engineer in charge.	Square Metre	5501.00	953.00

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1271	Doors and Windows	39.82	BDT	Providing and fixing 30mm thick PVC FLUSH L DOOR SHUTTER consisting of panel of hollow PVC profile of 20 mm thickness consisting frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm inserted inside the hollow section of stiles rails top and bottom rails and two 19x 19 mm MS tubes inserted horizontally inside the hollow profile section using 4/5 mm sheet using screws hollow profile shall be lipped with 10 mm (5mm x2) thick x 20 mm width on stiles and rails using solvent cement. The inner panel shall be laminated with 5mm thick termite proof waterproof plain /prelam PVC sheet using solvent cement on the both sides of the panel including stainless steel fixtures and fastening etc. Complete as per direction of Engineer incharge, manufacturers specification and drawing.	As directed by Engineer in charge.	Square Metre	5567.00	953.00
1272	Doors and Windows	39.83	BDT	Providing and fixing partition 4 mm thick Indian teak Veneer on one side and 6mm commercial type plywood on the other side including C.T.W. frame of 70 x 35 mm at 60 cm C/C on both ways, including finishing with French polishing to Veneer face and oil painting / french polishing to other face etc.complete. (without skirting)	As directed by Engineer in charge.	Square Metre	2807.00	498.00
1273	Doors and Windows	39.84	BDT	Providing and fixing partitions with 12 mm thick three layered flat pressed teakwood particle board both faces commercial bonded with phenol formaldehyde synthetic resin including CTW vertical 70 x 70 mm and top and bottom rail of 70 x 35 mm and covering batten of 20 x 10 mm at 1.00 metre apart on both ways or as directed including finishing with one coat of primer complete.	BD-T-63 Page Number 518	Square Metre	2902.00	440.00
1274	Doors and Windows	39.85	BDT	Providing and fixing partitions with 12 mm thick three layered flat pressed teakwood commercial board compressed one face and other teak veneer bonded with phenol formaldehyde synthetic resin including CTW vertical 70 x 70 mm and top and bottom rail of 70 x 35 mm and covering batten of 20 x 10 mm at 1.00 metre apart on both ways or as directed including finishing with one coat of primer complete.	BD-T-63 Page Number 518	Square Metre	3483.00	440.00
1275	Doors and Windows	39.86	BDT	Providing and fixing partition with 12mm thick three layered flat pressed veneer teak wood particle board with both faces teak veneer bonded with phenol formaldehyde synthetic resin including C.T.W. vertical 70 x 70 mm and top and bottom rail of 70 x 35 mm and covering batten of 20 x 10 mm at 1.00 metre apart on both ways or as directed including finishing with one coat of primer complete.	BD-T-68 Page Number 520	Square Metre	2614.00	677.00
1276	Doors and Windows	39.87	BDT	Providing and fixing in position C.C.T.W. brackets for weather sheds of section 70 x 45 mm with mortise and tenon joinery at 1.2 to 1.5 metre center to center or as directed and teak wood battens of required section, including fixing three numbers of iron nut and bolts to each bracket, necessary scaffolding and two coats of painting to wood work etc. complete.	As directed by Engineer in charge.	Cubic metre	114708.00	16517.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1277	Doors and Windows	39.88	BDT	Providing and fixing 22 B.W.G. plain galvanised iron sheets on top of weather shed, including scaffolding, fixing by means of nut and bolts or as directed etc. complete. (Brackets of 70 x 45 mm to be paid separately)	As directed by Engineer in charge.	Square Metre	741.00	177.00
1278	Doors and Windows	39.89	BDT	Providing and fixing 22 B.W.G. plain FRP sheets on top of weather shed, including scaffolding, fixing by means of nut and bolts or as directed etc. complete. (Brackets of 70 x 45 mm to be paid separately)	As directed by Engineer in charge.	Square Metre	3144.00	177.00
1279	Doors and Windows	39.90	BDT	Providing and fixing 4 mm thick plain A.C. sheets (of IS std.) on top of the weather shed including scaffolding, fixing by means of nuts and bolts or as directed etc. complete as per detailed drawing (Brackets of 70 x 45 mm to be paid separately).	As directed by Engineer in charge.	Square Metre	475.00	177.00
1280	Doors and Windows	39.92	BDT	Providing and fixing country teak wood runner size 150 x 75 mm over partition, including rounding, fixing in the masonry where necessary beading on sides etc. complete.	As directed by Engineer in charge.	Running metre	1083.00	123.00
1281	Doors and Windows	39.93	BDT	Providing and fixing teak wood cover moulding 45 x 20 mm over doors and windows in the required shape and size as per drawing, including all mouldings and finishing with french polishing etc. complete.	As directed by Engineer in charge.	Running metre	150.00	29.00
1282	Doors and Windows	39.94	BDT	Providing and fixing aluminium grill` (5.13 Kilogram/Square Metre) decorative of various sizes as per detail drawing and specification etc. complete. (Prior permission to be obtained from S.E. before execution of this item) (5.13 Kilogram/Square Metre)	As directed by Engineer in charge.	Square Metre	2251.00	796.00
1283	Doors and Windows	39.95	BDT	Providing and fixing solid core flush door shutter in double leaf 32 mm thick decorative type of exterior grade as per detailed drawings approved face veneers 3 mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, and finishing with French Polish etc. complete.	As directed by Engineer in charge.	Square Metre	3212.00	851.00
1284	Doors and Windows	39.96	BDT	Providing and fixing Country teak wood Four leaf paneled shutters, 35 mm thick style and rail and 25 mm thick panels without ventilator as per detailed drawing excluding the door frame, stainless steel fixtures and fastening and finishing the wood work with oil painting 3 coats complete	As directed by Engineer in charge.	Square Metre	6655.00	1252.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1285	Iron Work	40.01	BDU 1	Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete.	Bd.U.1 Page Number 537	Square Metre	1571.00	289.00
1286	Iron Work	40.02	BDU 1A	Providing and fixing mild steel grill work for windows, ventilators, etc. 15 Kilogram/Square Metre as per drawing including fixtures necessary welding and painting with one coat of anticorrosive paint and two coats of oil painting complete.	Bd.U.1 Page Number 537	Square Metre	1296.00	289.00
1287	Iron Work	40.03	BDU 2	Providing and fixing mild steel grill railing 20 Kilogram/sq.m with teak wood hand rail of size 75mm x 60 mm.and sill of 75mm.x 25 mm.and newel posts for staircases, including fabricating, fix-tures, erecting, painting the grill work with one coat of anti-corrosive paint and two coats of oil painting with approved colour and polishing the sill, hand rail and the newel post with french polish.	Bd.U.2 Page Number 537	Square Metre	2510.00	263.00
1288	Iron Work	40.04	BDU 2A	Providing and fixing mild steel grill railing 15 Kilogram/sq.m with Ghanateak wood hand rail of size 75mm x 60 mm and sill of 75mm.x 25mm and newel posts for staircases, including fabricating, fixtures, erecting, painting the grill work with one coat of anticorrosive paint and two coats of oil painting with approved colours and polishing the sill, hand rail and the newel post with french polish.	Bd.U.2 Page Number 537	Square Metre	2280.00	263.00
1289	Iron Work	40.05	BDW	Providing and erecting Y type barbed wire fencing with seven rows of wire with 2.45 mm dia G.I. pipe (Rezan/ concentiDeleted ire 0.75 mm dia) with hot dip and G.I. coated hooks as per drawing supported on M.S. angle 50 x 50 x 6 mm at 2.5 mtr. c/c including fixing and fastening with wire, painting M.S. angles with one coat of red lead primer and two coat of oil paint etc. complete.	As directed by Engineer in charge.	Running Metre	730.00	161.00
1290	Iron Work	40.06	BDW	Providing and fixing 40mm diameter and 1.5 mm thick Stainless steel hand railing in S.S.304 Grade including fabricating ,fixtures, erecting, necessary welding, grinding, finishing, buffing to stainless steel pipe etc. complete	As directed by Engineer Incharge	Running Metre	1956.00	842.00
1291	Iron Work	40.07	BDW	Providing and fixing 900mm high S.S.304 Grade Stainless steel railing with 40mm diameter and 1.5mm thick at top,40mm diameter and 1.5mm thick vertical supports spaced at 1.5m center to center and 8mm thick toughened glass including fabricating ,fixtures, erecting , necessary welding , grinding , finishing, buffing to stainless steel pipe etc. complete	As directed by Engineer Incharge	Running Metre	3918.00	873.00
1292	Iron Work	40.08	BDW	Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 mm dia. and vertical pipe of 38 mm dia at 0.60 m c/c or as required and horizontal pipes of 25 mm dia in three rows, all pipes of 2 mm thick including buffing,fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 mm dia above newel post of 75 mm diameter etc. complete (Prior approval of sample and brand by Ex.Engineer is necessary before use)	As directed by Engineer Incharge	Square Metre	3203.00	978.00

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1293	Iron Work	40.09	BDW	Providing and fixing mild steel grill railing weighing 15Kilogram/ Square Metre. with teak wood hand rail of size 75mm.x 60mm. and sill 75mm.x 25mm.and posts for verandah including fabricating, fixtures, erecting and painting the grill work with one coat of anticorrosive paint and two coats of oil paint and polishing the grill, hand rail with French polish. Spec. Number : Bd.U.3	As directed by Engineer Incharge	Square Metre	2378.00	725.00
1294	Iron Work	40.10	BDW	Providing and fixing mild steel grill railing weighing 15Kilogram/ Square Metre. with PVC handrail cover and newel post for staircases, including fabricating, fixtures, drilling holes in concrete / other surface, erecting the grill work, necessary welding, fixing by nuts and bolts, fixing PVC handrail cover, with one coat of anticorrosive paint and two coats of oil painting with approved colour and shade, remaking the damaged surface, cleaning, etc. complete. Spec. Number : As directed by Engineer in charge.	As directed by Engineer Incharge	Square Metre	2085.00	725.00
1295	Iron Work	40.11	BDW	Providing and fixing mild steel grill railing weighing 20Kilogram/ Square Metre. with PVC handrail cover and newel post for staircases, including fabricating, fixtures, drilling holes in concrete / other surface, erecting the grill work, necessary welding, fixing by nuts and bolts, fixing PVC handrail cover, with one coat of anticorrosive paint and two coats of oil painting with approved colour and shade, remaking the damaged surface, cleaning, etc. complete. Spec. Number : As directed by Engineer in charge.	As directed by Engineer Incharge	Square Metre	2626.00	725.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1296	Water Supply and Sanitary Fitting	41.01	BDV 1	Providing and laying cast iron pipes of B class of 80mm diameter with sockets and spigot ends/ flanges and cast centrifugally / vertically including specials, laying pipes and back filling the trench complete including excavation.	Bd.V.1 Page Number 547	Running Metre	1119.00	95.00
1297	Water Supply and Sanitary Fitting	41.02	BDV 1A	Providing and laying cast iron pipes of B class of 100mm diameter with sockets and spigot ends/ flanges and cast centrifugally/vertically including specials, laying pipes and back filling the trench complete including excavation.	Bd.V.1 Page Number 547	Running Metre	1386.00	115.00
1298	Water Supply and Sanitary Fitting	41.03	BDV 1B	Providing and laying cast iron pipes of B class of 150mm diameter with sockets and spigot ends/ flanges and cast centrifugally/ vertically including specials, laying pipes and back filling the trench complete including excavation.	Bd.V.1 Page Number 547	Running Metre	2698.00	420.00
1299	Water Supply and Sanitary Fitting	41.04	BDV 2	Providing and making lead joints for 80mm diameter cast iron pipe line including lead and testing.	Bd.V.2 Page Number 549	Number	649.00	385.00
1300	Water Supply and Sanitary Fitting	41.05	BDV 2A	Providing and making lead joints for 100mm diameter cast iron pipes line including lead and testing.	Bd.V.2 Page Number 549	Number	701.00	385.00
1301	Water Supply and Sanitary Fitting	41.06	BDV 2B	Providing and making lead joints for 150mm diameter cast iron pipe line including lead and testing	Bd.V.2 Page Number 549	Number	759.00	385.00
1302	Water Supply and Sanitary Fitting	41.07	BDV 3	Providing and making flanged connection for the 80mm diameter cast iron pipe line including painting rubber insertion, nuts and bolts etc. complete.	Bd.V.3 Page Number 550	Number	206.00	79.00
1303	Water Supply and Sanitary Fitting	41.08	BDV 3A	Providing and making flanged connection for the 100mm diameter cast iron pipe line including painting rubber insertion, nuts and bolts etc. complete.	Bd.V.3 Page Number 550	Number	258.00	79.00
1304	Water Supply and Sanitary Fitting	41.09	BDV 3B	Providing and making flanged connection for the 150mm diameter cast iron pipe line including painting rubber insertion, nuts and bolts etc. complete.	Bd.V.3 Page Number 550	Number	307.00	118.00
1305	Water Supply and Sanitary Fitting	41.10	BDV 5	Providing and fixing on walls/ ceiling/ floors, 15 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes weight of 1.48 Kilogram/metre with necessary fittings. remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	384.00	121.00

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1306	Water Supply and Sanitary Fitting	41.11	BDV 5	Providing and fixing on walls/ ceiling/ floors 20 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 1.93 Kilogram/meter with necessary fitting remaking good the demolished portion and applying primer of anti-corrosive oil paint, 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551c	Running Metre	457.00	161.00
1307	Water Supply and Sanitary Fitting	41.12	BDV 5	Providing and fixing on walls/ ceiling/ floors, 25 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes weight of 3.01 Kilogram/meter with necessary fittings . remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	542.00	122.00
1308	Water Supply and Sanitary Fitting	41.13	BDV 5	Providing and fixing on walls/ ceiling/ floors, 32 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes weight of 3.89 Kilogram/meter with necessary fittings . remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	584.00	123.00
1309	Water Supply and Sanitary Fitting	41.14	BDV 5	Providing and fixing on walls/ ceiling/ floors, 40 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes weight of 4.49 Kilogram/meter with necessary fittings and remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	649.00	124.00
1310	Water Supply and Sanitary Fitting	41.15	BDV 5	Providing and fixing on walls/ ceiling/ floors, 50 mm dia heavy grade having embossed as ISI Mark galvanised iron pipes weight of 6.33 Kilogram/meter with necessary fittings.and remaking good the demolished portion and primer of anti corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5Page Number 551	Running Metre	838.00	125.00
1311	Water Supply and Sanitary Fitting	41.16	BDV 5	Providing and fixing on walls/ ceiling/ floors, 80 mm dia.heavy grade having embossed as ISI Mark galvanised iron pipes weight of 10.15 Kilogram/meter with necessary fittings. and remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1319.00	129.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1312	Water Supply and Sanitary Fitting	41.17	BDV 5	Providing and fixing on walls/ ceiling/ floors, 100 mm dia.heavy grade having embossed as ISI Mark galvanised iron pipes weight of 14.74 Kilogram/meter with necessary fittings. and remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1481.00	132.00
1313	Water Supply and Sanitary Fitting	41.18	BDV 5	Providing and laying in trenches 15 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 1.25 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	385.00	170.00
1314	Water Supply and Sanitary Fitting	41.19	BDV 5	Providing and laying in trenches 20 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes ?of 1.63 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	463.00	210.00
1315	Water Supply and Sanitary Fitting	41.20	BDV 5	Providing and laying in trenches 25 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes ?of 2.49 Kilogram/meter necessary fitting remaking good the ?demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	469.00	184.00
1316	Water Supply and Sanitary Fitting	41.21	BDV 5	Providing and laying in trenches 32 mm dia.medium grade having embossed as ISI Mark galvanised iron pipes ?of 3.20 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	529.00	211.00
1317	Water Supply and Sanitary Fitting	41.22	BDV 5	Providing and laying in trenches 40 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes ?of 3.68 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	600.00	219.00
1318	Water Supply and Sanitary Fitting	41.23	BDV 5	Providing and laying in trenches 50 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes ?of 5.17 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	725.00	227.00

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1319	Water Supply and Sanitary Fitting	41.24	BDV 5	Providing and laying in trenches 80 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 8.57 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1011.00	231.00
1320	Water Supply and Sanitary Fitting	41.25	BDV 5	Providing and laying in trenches 100 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 12.43 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1271.00	254.00
1321	Water Supply and Sanitary Fitting	41.26	BDV 7	Providing and fixing 15mm diameter water meter with non-return valve including strainer, sockets/ union nut including water meter box making locking arrangement and lock. [Without chamber].	Bd.V.7 Page Number 554	Number	3179.00	358.00
1322	Water Supply and Sanitary Fitting	41.27	BDV 7	Providing and fixing 20mm diameter water meter with non-return valve including strainer, sockets/ union nut including water meter box making locking arrangement and lock. (without chamber).	Bd.V.7 Page Number 554	Number	4434.00	358.00
1323	Water Supply and Sanitary Fitting	41.28	BDV 7	Providing and fixing 25mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangement and lock. [Without chamber].	Bd.V.7 Page Number 554	Number	5903.00	358.00
1324	Water Supply and Sanitary Fitting	41.29	BDV 7	Providing and fixing 40mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock. [Withoutchamber].	Bd.V.7 Page Number 554	Number	10172.00	1073.00
1325	Water Supply and Sanitary Fitting	41.30	BDV 7	Providing and fixing 50mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangement and lock. [without chamber]	Bd.V.7 Page Number 554	Number	12940.00	1073.00
1326	Water Supply and Sanitary Fitting	41.31	BDV 7	Providing and fixing 80mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangement and lock. [Without chamber].	Bd.V.7 Page Number 554	Number	22214.00	1430.00
1327	Water Supply and Sanitary Fitting	41.32	BDV 7	Providing and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock. [Without chamber].	Bd.V.7 Page Number 554	Number	30560.00	1430.00
1328	Water Supply and Sanitary Fitting	41.40	BDV 8	Providing and fixing 15 mm dia. screw down bib/ stop tap of brass including necessary socket union nut complete.	Bd.V.8 Page Number 554	Number	572.00	91.00
1329	Water Supply and Sanitary Fitting	41.41	BDV 8	Providing and fixing 20 mm dia. screw down bib/ stop tap of brass including necessary socket union nut complete.	Bd.V.8 Page Number 554	Number	867.00	96.00
1330	Water Supply and Sanitary Fitting	41.42	BDV 8	Providing and fixing 25 mm dia. screw down bib/ stop tap of brass including necessary socket union nut complete.	Bd.V.8 Page Number 554	Number	1188.00	96.00

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1331	Water Supply and Sanitary Fitting	41.43	BDV 9	Providing and fixing screw down 15 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete	Bd.V.9 Page Number 555	Number	439.00	96.00
1332	Water Supply and Sanitary Fitting	41.44	BDV 9	Providing and fixing screw down for 20 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V.9 Page Number 555	Number	581.00	96.00
1333	Water Supply and Sanitary Fitting	41.45	BDV 9	Providing and fixing screw down for 25 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V.9 Page Number 555	Number	737.00	96.00
1334	Water Supply and Sanitary Fitting	41.46	BDV 9	Providing and fixing screw down for 32 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V.9 Page Number 555	Number	838.00	107.00
1335	Water Supply and Sanitary Fitting	41.47	BDV 9	Providing and fixing screw down for 40 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V.9 Page Number 555	Number	1008.00	107.00
1336	Water Supply and Sanitary Fitting	41.48	BDV 9	Providing and fixing screw down for 50 mm dia. wheeled stop tap of brass including necessary sockets/ union nut complete.	Bd.V.9 Page Number 555	Number	1714.00	129.00
1337	Water Supply and Sanitary Fitting	41.49	BDV 9	Providing and fixing screw down for 65 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V.9 Page Number 555	Number	2360.00	129.00
1338	Water Supply and Sanitary Fitting	41.50	BDV 9	Providing and fixing screw down for 80 mm. dia. wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V.9 Page Number 555	Number	3918.00	129.00
1339	Water Supply and Sanitary Fitting	41.51	BDV 12	Providing and fixing 100 mm dia. chromium plated brass showers rose to 15mm dia. supply pipe including necessary bend and socket complete.	Bd.V. 12 Page Number 556	Number	448.00	96.00
1340	Water Supply and Sanitary Fitting	41.52	BDV 14	Providing and fixing 15mm diameter concussion push button type brass/gun metal self-closing tap including necessary socket complete.	Bd.V.14 Page Number 557	Number	305.00	14.00
1341	Water Supply and Sanitary Fitting	41.53	BDV 14	Providing and fixing 25mm diameter concussion push button type brass/gun metal self-closing tap including necessary socket complete	Bd.V. 14 Page Number 557	Number	411.00	143.00
1342	Water Supply and Sanitary Fitting	41.54	BDV	Providing and fixing push cock (Self closing tap) symet type of 15 mm dia. including necessary socket, testing etc. complete.	As directed by Engineer- in-charge.	Number	399.00	143.00
1343	Water Supply and Sanitary Fitting	41.55	BDV	Providing and fixing push cock (Self closing tap) symet type of 20 mm dia. including necessary socket, testing etc. complete.	As directed by Engineer- in-charge.	Number	410.00	143.00
1344	Water Supply and Sanitary Fitting	41.56	BDV 19	Providing and fixing 45 cm wide mild steel ladder of 40mm x 6 mm mild steel flat stringers and steps of 18 mm dia. mild steel bar for water tank including fixing it in (1:2:4) M-15 cement concrete block 60cm x 30cm x 30cm and painting the ladder complete. (Anti Corossive Paint)	Bd. V. 19 Page Number 559	Running Metre	1151.00	608.00

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1345	Water Supply and Sanitary Fitting	41.57	BDV 23	Providing and fixing White Glazed Earthenware full stall type Urinal with P.V.C. flushing cistern of 5 liters capacity with fitting, inlet pipes and stop tap, brackets for fixing the cistern, 32 mm dia. P.V.C flush pipe with fittings and flushing arrangement including lead soil pipe, lead trap, soil pipe connection up to the outside face of the wall	Bd.V.23 Page Number 562	Number	8410.00	1144.00
1346	Water Supply and Sanitary Fitting	41.58	BDV 23	Providing and fixing White Glazed Earthenware Squatting plate (Ladies Urinal) with P.V.C. flushing cistern of 5 liters capacity with fitting, inlet pipes and stop tap, brackets for fixing the cistern, 32 mm dia. P.V.C flush pipe with fittings and flushing arrangement including lead soil pipe, lead trap, soil pipe connection up to the outside face of the wall	Bd.V.23 Page Number 562	Number	3986.00	1054.00
1347	Water Supply and Sanitary Fitting	41.59	BDV 23	Providing and fixing coloured glazed earthenware full stall type Urinal with P.V.C. flushing cistern of 5 liters capacity with fitting, inlet pipes and stop tap brackets for fixing the cistern 32mm dia. P.V.C. flush pipe with fittings and flushing arrangement including lead soil pipe, lead trap soil pipe connection up to the outside face of the wall.	Bd.V.23 Page Number 562	Number	8607.00	1483.00
1348	Water Supply and Sanitary Fitting	41.60	BDV 26	Providing and fixing white glazed earthenware lipped flat back/corner type Urinal with PVC 5 liters flushing cistern with fittings, inlet pipe with stop tap, brackets for fixing the cistern, 32 mm diameter P.V.C. flush pipe with fitting including lead soil pipe, lead trap and soil pipe connection up to the outside face of wall.	Bd.V.26 Page Number 564	Number	3976.00	1054.00
1349	Water Supply and Sanitary Fitting	41.61	BDV 27	Providing and fixing coloured glazed earthenware lipped flat back/corner type urinal with PVC 5 liters flushing cistern with fittings, capacity with fittings, inlet pipe and stop tap, brackets for fixing the cistern, P.V.C. flush pipe with fittings including lead soil pipe, lead trap and soil pipe connection up to the outside face of the wall.	Bd.V.27 Page Number 564	Number	3976.00	1054.00
1350	Water Supply and Sanitary Fitting	41.62	BDV 29	Providing and laying 100 mm dia. half round white glazed earthenware pipes in 1:5:10 cement concrete bedding including bends, etc. complete.	Bd.V.29 Page Number 565	Running Metre	332.00	45.00
1351	Water Supply and Sanitary Fitting	41.63	BDV 30	Providing and fixing white glazed earthenware Wash Hand Basin of 55cm. x 40 cm. size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connections including P.V.C. waste pipe and trap up to the outside face of the wall. Making good the damaged surface, testing etc. complete.	Bd.V.30 Page Number 565	Number	5318.00	1769.00
1352	Water Supply and Sanitary Fitting	41.64	BDV 30	Providing and fixing white glazed earthenware Wash Hand Basin of 45cm x 30cm size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including P.V.C. waste pipe and trap up to the outside face of the wall. Making good the damaged surface, testing etc. complete.	Bd.V.30 Page Number 565	Number	4713.00	1769.00

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1353	Water Supply and Sanitary Fitting	41.65	BDV 30	Providing and fixing white glazed earthenware Wash Hand Basin of 63cm x 45cm size including Bib cock stop tap brass heavy 15mm, brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including P.V.C. waste pipe and trap up to the outside face of the wall.	Bd.V.30 Page Number 565	Number	6117.00	1769.00
1354	Water Supply and Sanitary Fitting	41.66	BDV 30	Providing and fixing coloured glazed earthenware Wash Hand Basin of 55cm x 40 cm size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including P.V.C. waste pipe and trap up to the outside face of the wall. Making good the damaged surface, testing etc. complete.	Bd.V.30 Page Number 565	Number	4913.00	1769.00
1355	Water Supply and Sanitary Fitting	41.67	BDV 30	Providing and fixing coloured glazed earthenware Wash Hand Basin of 45 cm x 30 cm size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including P.V.C. waste pipe and trap up to the outside face of the wall. Making good the damaged surface, testing etc. complete.	Bd.V.30 Page Number 565	Number	5046.00	1769.00
1356	Water Supply and Sanitary Fitting	41.69	BDV	Providing and fixing White glazed with bottle trap earthenware Wash Hand Basin of 55x40 cm size including cold water pillar taps, brackets, rubber plugs and brass chain, stop tap, chromium plate bottle trap and necessary pipe connections including UPAC waste pipe and trap upto the outside face of the wall, making good the damaged surface, testing etc. complete.	BDV.-30 Page Number616	Number	6577.00	1679.00
1357	Water Supply and Sanitary Fitting	41.70	BDV	Providing and fixing White glazed with bottle trap earthenware Wash Hand Basin of 63x45 cm size including cold water pillar taps, brackets, rubber plugs and brass chain, stop tap, chromium plate bottle trap and necessary pipe connections including UPAC waste pipe and trap upto the outside face of the wall, making good the damaged surface, testing etc. complete.	BDV.-30 Page Number616	Number	7455.00	1679.00
1358	Water Supply and Sanitary Fitting	41.72	BDV	Providing and fixing Coloured glazed with bottle trap earthenware Wash Hand Basin of 55x40 cm. size including cold water pillar taps, brackets, rubber plugs and brass chain, stop tap, chromium plate bottle trap and necessary pipe connections including UPAC waste pipe and trap upto the outside face of the wall, making good the damaged surface, testing etc. complete.	BDV.-30 Page Number616	Number	4805.00	1384.00
1359	Water Supply and Sanitary Fitting	41.74	BDV 30	Providing and fixing coloured glazed earthenware Wash Hand Basin of 63 cm x 45 cm size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including P.V.C. waste pipe and trap up to the outside face of the wall.	Bd.V.30 Page Number 565	Number	4911.00	1430.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1360	Water Supply and Sanitary Fitting	41.75	BDV 31	Providing and fixing white glazed earthenware sink 600mm x 200mm x 450mm including all connection of the G.I. supply and P.V.C. waste pipes up to the outside face of the wall, cold water chromium plated screw down bib tap, rolled steel or C.I. brackets, rubber plug with chain and stop tap complete.	Bd.V.31 Page Number566	Number	4401.00	1679.00
1361	Water Supply and Sanitary Fitting	41.76	BDV 31	Providing and fixing white glazed earthenware sink 450mm x 200mm x 300mm including all connection of the G.I. supply and lead waste pipes up to the outside face of the wall, cold water chromium plated screw down bib tap, rolled steel or C.I. brackets, rubber plug with chain and stop tap complete.	Bd.V.31 Page Number566	Number	3887.00	1679.00
1362	Water Supply and Sanitary Fitting	41.77	BDV	Providing and fixing Autoclosing pillar cock of pressmatic tap of approved make or equivalent including all fixtures, fittings etc. complete.	As directed by Engineer in charge.	Number	1801.00	358.00
1363	Water Supply and Sanitary Fitting	41.78	BDV	Providing and constructing granite kitchen platform with fixing of stainless steel sink 600 mm x 450 mm size as per detailed drawing including vertical both side polished kadappah stone 25 to 30 mm thick supports with kadappah top 35 to 40 mm thick and polished granite 16 to 20 mm top with side strips of granite at front and both sides of platform raised with two vertical granite supports 15 cm height and top granite of 75 x 40 cm including cutting, opening for sink of required size in kadappah as well as granite etc. complete. (Platform top size 5.00 m x 0.60 m and height is 0.75 m)	As directed by Engineer in charge.	Square Metre	9180.00	1276.00
1364	Water Supply and Sanitary Fitting	41.79	BDV 32	Providing and fixing 8cm C.I. Nahani Trap including C.I. grating bend and piece of C.I. pipe upto the outside face of the wall complete.	Bd.V.32 Page Number567	Number	972.00	286.00
1365	Water Supply and Sanitary Fitting	41.80	BDV 32	Providing and fixing 10cm C.I. Nahani Trap including C.I. grating bend and piece of C.I. pipe upto the outside face of the wall complete.	Bd.V.32 Page Number567	Number	1104.00	286.00

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1366	Water Supply and Sanitary Fitting	42.01	BDV 37	Providing and laying 100mm diameter half round salt glazed stoneware pipes in brick masonry including fittings such as bends, tees, single junction, necessary excavation and jointing complete.	Bd.V.37, Page Number 571	Running Metre	467.00	120.00
1367	Water Supply and Sanitary Fitting	42.02	BDV 38	Providing and fixing 15cm x 10cm salt glazed stoneware gully trap in cement concrete 1:4:8 outside the building including cast iron grating in the sink, connecting glazed stoneware pipe, brick masonry chamber with cast iron lid and cast iron grating for the gully trap.	Bd.V.38, Page Number 572	Number	1374.00	289.00
1368	Water Supply and Sanitary Fitting	42.03	BDV 39	Providing and laying 100 mm dia salt glazed stoneware pipe including fittings such as bends, tees, single junction, double junctions laying, jointing (including excavation and refilling the trenches) complete.	Bd.V.39, Page Number 573	Running Metre	305.00	142.00
1369	Water Supply and Sanitary Fitting	42.04	BDV 39	Providing and laying for 150 mm dia salt glazed stoneware pipe including fittings Such as bends, tees, single junction, double junctions laying, jointing (including excavation and refilling the trenches) complete.	Bd.V.39, Page Number 573	Running Metre	376.00	142.00
1370	Water Supply and Sanitary Fitting	42.05	BDV 39	Providing and laying for 225mm dia. salt glazed S.W. Pipe including fitting such as bends, tees, single junction, double junctions laying, jointing (including excavation and refilling the trenches) complete	Bd.V.39, Page Number 573	Running Metre	408.00	143.00
1371	Water Supply and Sanitary Fitting	42.06	BDV 41	Providing and laying concrete pipes of I.S.NP. class of 100mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	Bd.V.41, Page Number 573	Running Metre	473.00	239.00
1372	Water Supply and Sanitary Fitting	42.07	BDV 41	Providing and laying concrete pipes of I.S.NP. class of 150mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	Bd.V.41, Page Number 573	Running Metre	500.00	261.00
1373	Water Supply and Sanitary Fitting	42.08	BDV 41	Providing and laying concrete pipes of I.S.NP. class of 225mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	Bd.V.41, Page Number 573	Running Metre	528.00	261.00
1374	Water Supply and Sanitary Fitting	42.09	BDV 41	Providing and laying concrete pipes of I.S.NP. class of 300mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	Bd.V.41, Page Number 573	Running Metre	705.00	270.00
1375	Water Supply and Sanitary Fitting	42.10	BDV 43	Providing and constructing Brick Masonry Inspection Chamber 60cm x 45cm x 90cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W. pipes, Brick Masonry, plastering from inside and airtight C. I. cover of 75Kilogramwith lid and frame fixed in cement concrete.	Bd.V.43, Page Number 574	Number	12069.00	1510.00
1376	Water Supply and Sanitary Fitting	42.11	BDV 43	Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm x 90cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and C.I. lid cover of 75Kilogramwith lid and frame fixed in cement concrete.	Bd.V.43 Page Number 574	Number	13023.00	1726.00

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1377	Water Supply and Sanitary Fitting	42.12	BDV 43	Providing and constructing Brick Masonry Inspection Chamber 60cm x 45cm x 90cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W. pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with R.C.C. Cover medium duty 140Kilogramwith frame etc complete.	Bd.V.43, Page Number 574	Number	7818.00	1521.00
1378	Water Supply and Sanitary Fitting	42.13	BDV 43	Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm x 90cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with R.C.C. Cover medium duty 140Kilogramwith frame etc complete.	Bd.V.43, Page Number 574	Number	9330.00	1738.00
1379	Water Supply and Sanitary Fitting	42.14	BDV 44	Providing and constructing Brick Masonry inspection Chamber 90cm x 45cm including 1:4:8 C.C foundation, 1:2:4 C.C.channels/half round glazed stoneware pipe channel, salt glazed stone-ware intercepting trap with rodding pipe set in 1:4:8 cement concrete block, brick masonry plastering inside and Outside, with C.I. lead cover of 75Kilogramwith frame fixed in cement concrete.	Bd.V.44, Page Number 575	Number	13591.00	1726.00
1380	Water Supply and Sanitary Fitting	42.15	BDV 44	Providing and constructing Brick Masonry inspection trap Chamber 90cm x 45cm including 1:4:8 C.C foundation, 1:2:4 C.C.channels/half round glazed stoneware pipe channel, salt glazed stone-ware intercepting trap with rodding pipe set in 1:4:8 cement concrete block, brick masonry plastering inside and Outside, fixed in cement concrete with R.C.C. Cover medium duty 140 Kilogram. etc complete	Bd.V.44, Page Number 575	Number	9810.00	1726.00
1381	Water Supply and Sanitary Fitting	42.16	BDV	Providing and constructing Brick Masonry Inspection Chamber 60cm x 45cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channels half round G.S.W. pipes, Brick Masonry, plastering from inside and airtight 75 mm thick R.C.C. cover medium duty 100Kilogrametc. complete.	Bd.V.43 Page Number 574	Number	7556.00	2296.00
1382	Water Supply and Sanitary Fitting	42.17	BDV	Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm With R.C.C. raft in B.C. soil area including cost of reinforcement, 1:2:4 cement concrete channels half round G.S.W. pipes, Brick Masonry, plastering from inside and airtight with 75 mm thick R.C.C. cover medium duty 140Kilogrametc. complete.	Bd.V.43 Page Number 574	Number	9187.00	2740.00
1383	Water Supply and Sanitary Fitting	42.18	BDV 45	Providing and fixing hume pipe septic tank 900mm diameter with vent pipe and cap including necessary (including excavation and laying)	Bd.V.45, Page Number 575	Number	14515.00	3554.00
1384	Water Supply and Sanitary Fitting	42.19	BDV 46	Providing soak pit of size 120cm x 120cm x 120cm including excavating and filling with brick-bats.	Bd.V.46, Page Number 576	Number	2590.00	1021.00
1385	Water Supply and Sanitary Fitting	42.20	BDV	Providing and fixing 450mm x 550mm size superior type Belgium mirror with 16mm dia. nickel plated towel rod etc. complete.	As directed by Engineer in charge.	Number	747.00	173.00

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1386	Water Supply and Sanitary Fitting	42.21	BDV 60	Providing, laying and fixing P.V.C. pipe of 15mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	73.00	29.00
1387	Water Supply and Sanitary Fitting	42.22	BDV 60	Providing, laying and fixing P.V.C. pipe of 20mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	99.00	4.00
1388	Water Supply and Sanitary Fitting	42.23	BDV 60	Providing, laying and fixing P.V.C. pipe of 25mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	131.00	29.00
1389	Water Supply and Sanitary Fitting	42.24	BDV 60	Providing, laying and fixing P.V.C. pipe of 32mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	178.00	29.00
1390	Water Supply and Sanitary Fitting	42.25	BDV 60	Providing, laying and fixing P.V.C. pipe of 40mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	264.00	36.00
1391	Water Supply and Sanitary Fitting	42.26	BDV 60	Providing, laying and fixing P.V.C. pipe of 50mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	345.00	43.00
1392	Water Supply and Sanitary Fitting	42.27	BDV 60	Providing, laying and fixing P.V.C. pipe of 75mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	350.00	43.00
1393	Water Supply and Sanitary Fitting	42.28	BDV 60	Providing, laying and fixing P.V.C. pipe of 110 mm. dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	As directed by Engineer in charge.	Running Metre	483.00	43.00
1394	Water Supply and Sanitary Fitting	42.29	BDV	Providing and fixing partition with kadappa stone of all sizes and 25 mm thick polished on both side and edges to original including fixing in position in cement mortar 1:4 curing polishing, cleaning etc complete.	As directed by Engineer in charge.	Square Metre	971.00	190.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1395	Water Supply and Sanitary Fitting	42.30	BDV	Providing and fixing Orissa type white glazed earthenware 575 mm water closet pan including S trap with earthenware foot rests, cast iron soil and vent pipe upto outside face of the wall 1:2:4 brick bat lime concrete bedding without flushing tank and its accessories etc. complete.	As directed by Engineer in charge.	Number	3242.00	1821.00
1396	Water Supply and Sanitary Fitting	42.31	BDV	Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete.	As directed by Engineer in charge.	Number	254.00	32.00
1397	Water Supply and Sanitary Fitting	42.32	BDV	Providing and Fixing half turn 25 mm dia gun metal flushing cock including all accessories etc. complete.	As directed by Engineer in charge.	Number	787.00	12.00
1398	Water Supply and Sanitary Fitting	42.33	BDV	Providing and fixing 1st class white glazed earthenware Orissa Type W.C. Pan 580 mm dia including P or S trap cast iron soil and vent pipe upto the outside face of the wall (1:5:1 0) cement concrete bedding 15 mm thick, 10 liter P.V.C. flushing cistern with all necessary pipe connection etc. complete.	As directed by Engineer in charge.	Number	6374.00	1613.00
1399	Water Supply and Sanitary Fitting	42.34	BDV	Providing and fixing European type white glazed earthenware coupled closet symphonic trap with symphonic low level white glazed 10 litres cistern with black backlite seat with all necessary pipe connection etc. complete.	As directed by Engineer in charge.	Number	9245.00	282.00
1400	Water Supply and Sanitary Fitting	42.35	BDV	Providing and fixing orissa type colour glazed earthenware 625 x 450 mm. w.c. pan including trap, C.I. soil and vent pipe upto the out side face of wall including 100 mm. dia. C.I. plug, bend, 15mm. thick 10 litre PVC flushing cistern with all necessary pipe connection etc. complete.	As directed by Engineer in charge.	Number	8343.00	1616.00
1401	Water Supply and Sanitary Fitting	42.36	BDV	Providing and fixing 40 mm. dia Ball cock medium type with PVC float including sockets and necessary fittings and tested as per municipal requirements etc. complete.	As directed by Engineer in charge.	Number	1010.00	76.00
1402	Water Supply and Sanitary Fitting	42.37	BDV	Providing and fixing 15 mm. dia Ball cock medium type with PVC float including sockets and necessary fittings and tested as per municipal requirement etc. complete.	As directed by Engineer in charge.	Number	410.00	65.00
1403	Water Supply and Sanitary Fitting	42.38	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. i) Tank capacity up to 2,000 litre.	As directed by Engineer in charge.	Number	430.00	292.00
1404	Water Supply and Sanitary Fitting	42.39	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. ii) Tank capacity up to 2,001 to 5000 litre.	As directed by Engineer in charge.	Number	543.00	326.00

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1405	Water Supply and Sanitary Fitting	42.40	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. iii) Tank capacity up to 5,001 to 7000 litre.	As directed by Engineer in charge.	Number	571.00	326.00
1406	Water Supply and Sanitary Fitting	42.41	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. iv) Tank capacity up to 7,001 to 10000 litre.	As directed by Engineer in charge.	Number	712.00	361.00
1407	Water Supply and Sanitary Fitting	42.42	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. v) Tank capacity upto 10,001 to 15,000 litre.	As directed by Engineer in charge.	Number	859.00	468.00
1408	Water Supply and Sanitary Fitting	42.43	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. vi) Tank capacity upto 15,001 to 20,000 litre.	As directed by Engineer in charge.	Number	1368.00	860.00
1409	Water Supply and Sanitary Fitting	42.44	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. vii) Tank capacity upto 20,001 to 30,000 litre.	As directed by Engineer in charge.	Number	2150.00	1421.00
1410	Water Supply and Sanitary Fitting	42.45	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. viii) Tank capacity upto 30,001 to 40,000 litre	As directed by Engineer in charge.	Number	2360.00	1593.00
1411	Water Supply and Sanitary Fitting	42.46	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. ix) Tank capacity up to 40,001 to 50000 litre.	As directed by Engineer in charge.	Number	3212.00	2188.00
1412	Water Supply and Sanitary Fitting	42.47	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. x) capacity 50,001 litre to one lakh.	As directed by Engineer in charge.	1000 Litre	52.00	37.00

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1413	Water Supply and Sanitary Fitting	42.48	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. xi) Capacity above one lakh upto 4.00 lakh	As directed by Engineer in charge.	1000 Litre	28.00	22.00
1414	Water Supply and Sanitary Fitting	42.49	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. xii) Capacity above 4.00 lakh upto 7.00 lakh .	As directed by Engineer in charge.	1000 Litre	22.00	17.00
1415	Water Supply and Sanitary Fitting	42.50	BDV	Cleaning elevated water storage Reservoir within a given period, by using bleaching powder at the rate of 14 gm/sq.m .washing thrice potassium permanganate at the rate of 2.50 gm/sq.m. finally, cleaning washing by using nylon brush, coir string and duster, bailing out water etc. complete. xiii) Capacity above 7.00 lakh upto 12.00 lakh.	As directed by Engineer in charge.	1000 Litre	19.00	14.00
1416	Water Supply and Sanitary Fitting	42.51	BDV	Providing and fixing 75 mm dia stabiliser pipe/ P.V.C. soil vent/waste pipe and with necessary fixtures and fitting such as bends, tees, single junctions, slotted vent, clamps etc. complete	As directed by Engineer in charge.	Running Metre	499.00	146.00
1417	Water Supply and Sanitary Fitting	42.52	BDV	Providing and fixing 100 mm dia stabiliser pipe/ P.V.C. soil vent/waste pipe and with necessary fixtures and fitting such as bends, tees, single junctions, slotted vent, clamps etc. complete.	As directed by Engineer in charge.	Running Metre	671.00	146.00
1418	Water Supply and Sanitary Fitting	42.53	BDV	Providing and fixing H.D.P container Syntex or alike one piece moulded water tank made out of high density polythylene and built corrugated inclusive of delivery up to destination hoisting and fixing of accessories such as inlet,outlet overflow pipe inclusive of all tanks capacity between 200 to 1000 liters	As directed by engineer-in-charge.	Litre	13.00	1.00
1419	Water Supply and Sanitary Fitting	42.54	BDV	Providing and fixing H.D.P container Syntex or alike one piece moulded water tank made out of low density polythylene and built corrugation including of delivery up to destination hoisting and fixing of accessories such as inlet, outlet overflow of all tanks capacity above 1000 to 20,000 litres	As directed by engineer-in-charge.	Litre	11.00	1.00
1420	Water Supply and Sanitary Fitting	42.55	BDV	Providing and fixing on walls/ ceiling/ floor 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	190.00	114.00
1421	Water Supply and Sanitary Fitting	42.56	BDV 5	Providing and fixing on walls/ceiling/floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	215.00	114.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1422	Water Supply and Sanitary Fitting	42.57	BDV 5	Providing and fixing on walls/ ceiling/ floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	262.00	114.00
1423	Water Supply and Sanitary Fitting	42.58	BDV 5	Providing and fixing on walls/ ceiling/ floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	320.00	114.00
1424	Water Supply and Sanitary Fitting	42.59	BDV 5	Providing and fixing on walls /ceiling/ floor 40 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	404.00	114.00
1425	Water Supply and Sanitary Fitting	42.60	BDV 5	Providing and fixing on walls/ ceiling/ floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	599.00	114.00
1426	Water Supply and Sanitary Fitting	42.61	BDV 5	Providing and laying in trenches 15 mm dai. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	213.00	140.00
1427	Water Supply and Sanitary Fitting	42.62	BDV 5	Providing and laying in trenches 20 mm dai. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	239.00	141.00
1428	Water Supply and Sanitary Fitting	42.63	BDV 5	Providing and laying in trenches 25 mm dai. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	277.00	130.00
1429	Water Supply and Sanitary Fitting	42.64	BDV 5	Providing and laying in trenches 32 mm dai. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	346.00	140.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1430	Water Supply and Sanitary Fitting	42.65	BDV 5	Providing and laying in trenches 40mm dai. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	430.00	140.00
1431	Water Supply and Sanitary Fitting	42.66	BDV 5	Providing and laying in trenches 50mm dai. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5 page 551 and as directed by Engineer in charge	Running Metre	620.00	140.00
1432	Water Supply and Sanitary Fitting	42.67	BDV 32	Providing and fixing 10 cm PVC nahani trap with grating etc. complete.	BD.V 32 A page 551 and as directed by Engineer in charge	Number	469.00	286.00
1433	Water Supply and Sanitary Fitting	42.68	BDV	Providing and fixing reinforced cement concrete cover of size 90 cm x 45 cm with frame over inspection chamber etc. complete. Heavy duty (225 Kilogram)	As directed by Engineer in charge.	Number	4847.00	323.00
1434	Water Supply and Sanitary Fitting	42.69	BDV	Providing and fixing reinforced cement concrete cover of size 90 cm x 45 cm with frame over inspection chamber etc. complete. Medium duty (140 Kilogram)	As directed by Engineer in charge.	Number	3547.00	550.00
1435	Water Supply and Sanitary Fitting	42.70	BDV	Providing and fixing reinforced cement concrete cover of size 60 cm x 45 cm with frame over inspection chamber etc. complete. Heavy duty (160 Kilogram)	As directed by Engineer in charge.	Number	5024.00	516.00
1436	Water Supply and Sanitary Fitting	42.71	BDV	Providing and fixing reinforced cement concrete cover of size 60 cm x 45 cm with frame over inspection chamber etc. complete. Medium duty (100 Kilogram)	As directed by Engineer in charge.	Number	3001.00	516.00
1437	Water Supply and Sanitary Fitting	42.72	BDV 4	Providing and making ISI Mark ferrule connection of 15 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V. 4 page 551	Number	1085.00	459.00
1438	Water Supply and Sanitary Fitting	42.73	BDV 4	Providing and making ISI Mark ferrule connection of 20 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V. 4 page 551	Number	1467.00	459.00
1439	Water Supply and Sanitary Fitting	42.74	BDV 4	Providing and making ISI Mark ferrule connection of 25mm dia.to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V. 4 page 551	Number	2186.00	459.00

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1440	Water Supply and Sanitary Fitting	42.75	BDV 4	Providing and making ISI Mark ferrule connection of 32 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V. 4 page 551	Number	3290.00	459.00
1441	Water Supply and Sanitary Fitting	42.76	BDV 4	Providing and making ISI Mark ferrule connection of 40mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V. 4 page 551	Number	4531.00	459.00
1442	Water Supply and Sanitary Fitting	42.77	BDV 4	Providing and making ISI Mark ferrule connection of 50 mm dia. to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V. 4 page 551	Number	7328.00	459.00
1443	Water Supply and Sanitary Fitting	42.78	BDV 4	Providing and fixing stainless steel sink of size 600 x 510 x 200 mm includng coupling, outlet pipe, elbow and other necessary fitting, finishing etc. complete.	As directed by Engineer in charge	Number	14515.00	2542.00
1444	Water Supply and Sanitary Fitting	42.79	BDV	Providing and fixing C.P. Angular stop clock with wall flange of approved make continental including necessary sockets/union nut etc. complete.	As directed by Engineer in charge	Number	2440.00	218.00
1445	Water Supply and Sanitary Fitting	42.80	BDV	Providing and fixing C.P.Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete.	As directed by Engineer in charge	Number	1244.00	218.00
1446	Water Supply and Sanitary Fitting	42.81	BDV	Providing and fixing C.P. wall mixer with provision for overhead shower with 115mm long bend pipe and wall flange of approved make including necessary sockets/union nut etc. complete.	As directed by Engineer in charge	Number	3753.00	437.00
1447	Water Supply and Sanitary Fitting	42.82	BDV	Providing and fixing C.P. pillar cock long neck with aerator of approed make including necessary sockets/union nut etc. complete.	As directed by Engineer in charge	Number	1236.00	218.00
1448	Water Supply and Sanitary Fitting	42.83	BDV	Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	As directed by Engineer in charge	Number	983.00	256.00
1449	Water Supply and Sanitary Fitting	42.84	BDV	Providing and fixing C.P. sink cock with raised J" shaped swinging casted spout of approved make including necessary sockets/ union nut etc. complete."	As directed by Engineer in charge	Number	1543.00	218.00

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1450	Water Supply and Sanitary Fitting	42.85	BDV	Providing and fixing P.V.C. Rain water pipes of 160mm outer diameter and having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc. complete.	As directed by Engineer Incharge	Running Metre	1252.00	219.00
1451	Water Supply and Sanitary Fitting	42.86	BDV	Providing and fixing European type wall-hung white water closet of approved make with push valve concealed type with cover plate 32mm size of approved make including soil pipe, vent pipe up to outside face of wall ,100mm dia. G.I. plug bend inlet pipe all fittings, cuttingand making good walls, floors etc. complete.	As directed by Engineer Incharge	Number	12391.00	1928.00
1452	Water Supply and Sanitary Fitting	42.87	BDV	Providing and fixing P.V.C. Rain water pipes of 110mm outer diameter and having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc. complete.	As directed by Engineer Incharge	Running Metre	459.00	146.00
1453	Water Supply and Sanitary Fitting	42.88	BDV	providing and fixing oval type under counter wash hand basin of 16 inch x 22 inch size and of special colour shade having telephonic black / coloured granite of 180 mm thick stone black kadappa framework including chromium plated coupling bottle - Trap using CERA company or equivalent oval typa wash basin model no 3448 as per detailed drawing or as directed by engg incharge etc complete. (Counter size 1.20 m x 0.60 m)	As directed by Engineer in charge	Number	10458.00	146.00

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1454	Water Supply and Sanitary Fitting	43.01	BDV 5	Providing and laying in walls/ceilings/floors 15 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 1.25 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	318.00	121.00
1455	Water Supply and Sanitary Fitting	43.02	BDV 5	Providing and laying in walls/ceilings/floors 20 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 1.63 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	360.00	161.00
1456	Water Supply and Sanitary Fitting	43.03	BDV 5	Providing and laying in walls/ceilings/floors 25 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 2.49 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	412.00	122.00
1457	Water Supply and Sanitary Fitting	43.04	BDV 5	Providing and laying in walls/ceilings/floors 32 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 3.20 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	491.00	123.00
1458	Water Supply and Sanitary Fitting	43.05	BDV 5	Providing and laying in walls/ ceilings/floors 40 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 3.68 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	547.00	124.00
1459	Water Supply and Sanitary Fitting	43.06	BDV 5	Providing and laying in walls/ceilings/floors 50 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 5.17 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	677.00	125.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1460	Water Supply and Sanitary Fitting	43.07	BDV 5	Providing and laying in walls/ceilings/floors 80 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 8.57 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1066.00	129.00
1461	Water Supply and Sanitary Fitting	43.08	BDV 5	Providing and laying in walls/ceilings/floors 100 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 12.43 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1157.00	132.00
1462	Water Supply and Sanitary Fitting	43.09	BDV 5	Providing and laying in trenches 15 mm dia.heavy grade having embossed as ISI Mark galvanised iron pipes of 1.48 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	413.00	170.00
1463	Water Supply and Sanitary Fitting	43.10	BDV 5	Providing and laying in trenches 20 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 1.93 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	483.00	210.00
1464	Water Supply and Sanitary Fitting	43.11	BDV 5	Providing and laying in trenches 25 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 3.01 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	554.00	211.00
1465	Water Supply and Sanitary Fitting	43.12	BDV 5	Providing and laying in trenches 32 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 3.89 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	582.00	211.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1466	Water Supply and Sanitary Fitting	43.13	BDV 5	Providing and laying in trenches 40 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 4.49 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	651.00	219.00
1467	Water Supply and Sanitary Fitting	43.14	BDV 5	Providing and laying in trenches 50 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 6.33 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	816.00	228.00
1468	Water Supply and Sanitary Fitting	43.15	BDV 5	Providing and laying in trenches 80 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 10.15 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1219.00	231.00
1469	Water Supply and Sanitary Fitting	43.16	BDV 5	Providing and laying in trenches 100 mm dia. heavy grade having embossed as ISI Mark galvanised iron pipes of 14.74 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page Number 551	Running Metre	1596.00	254.00
1470	Water Supply and Sanitary Fitting	43.17	BDV 23	Providing and fixing 8 cm rigid PVC Nahani trap including PVC grating ,bend, connecting piece of UPVC pipe up to the outside face of wall ,making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Ex. Engr. is necessary before use)	Specfications	Number	478.00	286.00
1471	Water Supply and Sanitary Fitting	43.18	BDV 24	Providing and fixing 15 cm rigid PVC Nahani trap including PVC grating ,bend,connectingpiece of UPVC pipe up to the outside face of wall ,making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Ex. Engr. is necessary before use)	Specfications	Number	514.00	286.00
1472	Water Supply and Sanitary Fitting	43.19	BDV 21	Providing and fixing European type white glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall 10 litre enameled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps ,20 mm dia.UPVC overflow pipe ,mosquito proof couplings G.I. chain and pulley,with water Jet and fitting including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	Specfications	Number	9960.00	1928.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1473	Water Supply and Sanitary Fitting	43.20	BDV 21	Providing and fixing European type white glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall without flushing cistern with flush cock and with water Jet and necessary fittings including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	Specifications	Number	9225.00	1928.00
1474	Water Supply and Sanitary Fitting	43.21	BDV 22	Providing and fixing European type Colour glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall 10 liter enameled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps ,20 mm dia.UPVC overflow pipe ,mosquito proof couplings G.I. chain and pulley,with water Jet and fitting including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	Specifications	Number	9960.00	1928.00
1475	Water Supply and Sanitary Fitting	43.22	BDV 23	Providing and fixing European type Colour glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall without flushing cistern with flush cock and with water Jet and necessary fittings including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	Specifications	Number	9225.00	1928.00
1476	Water Supply and Sanitary Fitting	43.23	BDV 20	Providing and fixing Anglo Indian type white glazed earthenware water closet pan with trap with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall with flushing cistern and necessary fittings including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	Specifications	Number	6362.00	2276.00
1477	Water Supply and Sanitary Fitting	43.24	BDV 22	Providing and fixing high level 10 liter capacity with fittings inlet PVC pipe with stop tap ,brackets for fixing the cistern,32 mm dia. PVC flush pipe with fitting and clamps 20 mm dia. PVC overflow pipe with mosquito proof couplings, galvanised iron chain and pulley painting if ordered to cistern pipe etc. and cutting and making good the damaged wall and testing etc. complete (Prior approval of sample and brand by Ex. Engr. is necessary before use)	Specifications	Number	1166.00	338.00
1478	Water Supply and Sanitary Fitting	43.25	BDV 23	Providing and fixing in position UPVC ultra violet stabilized 110 mm outer diameter cowl dome confirming to I.S.-4985 including making joints with solvent cement etc. complete	Specifications	Number	150.00	72.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1479	Water Supply and Sanitary Fitting	43.26	BDV 23	Providing and fixing Glass self 125 mm wide and 600 mm long with necessary chromium plated brackets providing T.W.gutties etc. complete	Specifications	Number	316	129
1480	Water Supply and Sanitary Fitting	43.27	BDV 23	Providing , constructing and fixing 250 mm dia. Inspection chamber made up of UPVC material of thickness 3.5 mm and height of 259 mm with inlet and outlet of 110 mm dia. with 75 mm dia. U Trap, Ultra shaft pipe of Upvc material having height of 470 mm and fixing Ultra 250 mm dia. UPVC cover and frame in 150 mm thick in c.c.1:2:4, having crushed sand bed of 100 mm thick of size 550 mm dia. Including excavation and refilling the sides of chamber by crushed sand cushioning 150 mm thickness, connecting all required UPVC fittings with rubber lubricant etc. complete.	Specifications	Number	3484.00	565.00
1481	Water Supply and Sanitary Fitting	43.28	Bd-V	Providing , constructing and fixing 450 mm dia. Inspection chamber made up of Polypropylene / polyethylene material of thickness 3.5 mm and height of 388 mm with 160 or 200 mm main inlet (s) outlet and 110 and / or 160 mm branch inlets, with 450 mm dia. Ultra shaft pipe of HDPE material having height of 460 mm, having R.C.C. cover and frame fixing in 150 mm thick in c.c.1:2:4, having crushed sand bed of 150 mm thick of size 750 mm dia. Including excavation and refilling the sides of chamber by sand crushed cushioning 150 mm thickness, connecting all required UPVC fittings with rubber lubricant etc. complete.	As Directected By Engineer Incharge	Number	10341.00	706.00
1482	Water Supply and Sanitary Fitting	43.29	Bd-V	Providing , constructing and fixing 600 mm dia. Inspection chamber made up of Polypropylene / polyethylene material Having 315 mm diameter inlet(s)/outlets and with eccentric reducers as per requirement to connect 160 mm and 200 mm pipes having thickness of 5 mm and 600 mm in height, with inbuilt shaft achieve the invert depth as per site condition of wall thickness of 5 mm having R.C.C. cover and frame fixing in 150 mm thick in c.c.1:2:4, having crushed sand bed of 150 mm thick of size 750 mm dia. Including excavation and refilling the sides of chamber by sand crushed cushioning 150 mm thickness, connecting all required UPVC fittings with rubber lubricant etc.complete.	As Directected By Engineer Incharge	Number	20393.00	706.00
1483	Water Supply and Sanitary Fitting	43.30	Bd-V	Providing , laying and fixing ,jointing Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete.	As Directected By Engineer Incharge	Running Metre	333.00	43.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1484	Water Supply and Sanitary Fitting	43.31	Bd-V	Providing , laying and fixing ,jointing Eco- drain 160 mm SN 4 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees , coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated materialetc. complete.	As Directected By Engineer Incharge	Running Metre	522.00	43.00
1485	Water Supply and Sanitary Fitting	43.32	Bd-V	Providing , laying and fixing ,jointing Eco- drain 200 mm SN 4 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees tees, coupler etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated materialetc. complete.	As Directected By Engineer Incharge	Running Metre	926.00	43.00
1486	Water Supply and Sanitary Fitting	43.33	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super bib tap with flange including all accessories etc complete	As Directected By Engineer Incharge	Number	381.00	109.00
1487	Water Supply and Sanitary Fitting	43.34	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super Two Way bib tap with flange and extender including all accessories etc complete	As Directected By Engineer Incharge	Number	599.00	109.00
1488	Water Supply and Sanitary Fitting	43.35	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super push button type cock / tap with flange including all accessories etc complete	As Directected By Engineer Incharge	Number	397.00	109.00
1489	Water Supply and Sanitary Fitting	43.36	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super wall sink type tap with flange including all accessories etc complete	As Directected By Engineer Incharge	Number	865.00	109.00
1490	Water Supply and Sanitary Fitting	43.37	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super jet spray with flange 2 in 1 faucet 1.50 metre long including all accessories etc complete	As Directected By Engineer Incharge	Number	663.00	109.00
1491	Water Supply and Sanitary Fitting	43.38	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super right angle stop tap with flange including all accessories etc complete	As Directected By Engineer Incharge	Number	386.00	109.00
1492	Water Supply and Sanitary Fitting	43.39	BDV	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super Pillar tap with flange including all accessories etc complete	As Directected By Engineer Incharge	Number	501.00	109.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1493	Water Supply and Sanitary Fitting	43.40	BDV	Providing and fixing ISI 1729/2002 grade 75 mm dia Cast Iron Waste Water Pipe with lugs necessary fittings such as bends, tees, single junction, double junction, slotted vent, offsets on wall or into the ground including filling joints with cement mortar 1:2 proportion fixing on wall by means by galvanised Mild Steel bracket of 30 x 5 mm plate and 8 mm square rod with Galvanised Iron clamp with washer as per design drawing and as directed to keep pipe 50 mm away from wall including necessary scaffolding and painting the exposed faces with one coat of red lead oil paint and two coats of gray oil paint including removing the existing pipe if necessary and conveying and stacking in PWD Chowky or as directed by Engineer-in-Charge.	As Directected By Engineer Incharge	Running Metre	1529.00	479.00
1494	Water Supply and Sanitary Fitting	43.41	BDV	Providing and fixing ISI 1729/2002 grade 100 mm dia Cast Iron Soil Pipes With lugs including plug bend necessary fittings such as bends, tees, single junction, double junction, slotted vent, offsets on wall or into the ground including filling joints with cement mortar 1:2 proportion fixing on wall by means of galvanised Mild Steel bracket of 30 x 5 mm plate and 8 mm square rod with Galvanised Iron clamp with washer as per design, drawing and as directed to keep pipe 50 mm away from wall including necessary scaffolding and painting the exposed faces with one coat of red lead oil paint and two coats of white oil paint including removing the existing pipe if necessary and conveying and stacking in PWD Chowky or as directed by Engineer-in-Charge.	As Directected By Engineer Incharge	Running Metre	1778.00	479.00
1495	Water Supply and Sanitary Fitting	43.42	BDV	Providing and fixing Wall Mounted European type white glazed earthenware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the outside face of wall 10 liter enameled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps ,20 mm dia.UPVC overflow pipe ,mosquito proof couplings G.I. chain and pulley,with water Jet and fitting including cutting and making good to the walls and floors testing etc. complete.(prior approval of sample and brand by Ex. Engineer is necessary before use)	As Directected By Engineer Incharge	Number	11056.00	1600.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1496	Building Miscellaneous Item	44.01	BDW 2	Guniting by dry mix process as per IS 9012 (1978) to ceiling soffit etc. in C.M. 1:3, 20mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm including forms, scaffolding,floating the surface, curing for 14 days etc. complete (Excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	525.00	272.00
1497	Building Miscellaneous Item	44.02	BDW 2A	Guniting by dry mix process as per IS 9012 (1978) to ceiling soffit etc. in C.M. 1:3, 25mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm including forms, scaffolding,floating the surface, curing for 14 days etc. complete (Excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	557.00	272.00
1498	Building Miscellaneous Item	44.03	BDW 2B	Guniting by dry mix process as per IS 9012 (1978) to ceiling soffit etc. in C.M. 1:3,40mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.m including forms, scaffolding,floating the surface, curing for 14 days etc. complete (Excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	646.00	272.00
1499	Building Miscellaneous Item	44.04	BDW 2C	Guniting by dry mix process as per IS 9012 (1978) to ceiling soffit etc. in C.M. 1:3,50mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm including forms, scaffolding,floating the surface, curing for 14 days etc. complete (Excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	756.00	272.00
1500	Building Miscellaneous Item	44.05	BDW 2D	Guniting by dry mix process as per IS 9012 (1978) to beams in C.M. 1:3,20mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm including forms, scaffolding,floating the surface, curing for 14 days etc. complete (Excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	558.00	304.00
1501	Building Miscellaneous Item	44.06	BDW 2E	Guniting by dry mix process as per IS 9012 (1978) to beams in C.M. 1:3,25mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm including forms, scaffolding,floating the surface, curing for 14 days etc. complete (Excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	591.00	304.00
1502	Building Miscellaneous Item	44.07	BDW 2K	Guniting by dry mix process as per IS 9012 (1978) to the vertical surface (other than column) in C.M. 1:3,20mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm.including forms,scaffolding, floating the surface curing for 14 days etc.complete (excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	507.00	272.00
1503	Building Miscellaneous Item	44.08	BDW 2L	Guniting by dry mix process as per IS 9012 (1978) to the vertical surface (other than column) in C.M. 1:3, 25mm thick under pressure of 2.1Kilogramto 2.8Kilogramper sq.cm.including forms,scaffolding, floating the surface curing for 14 days etc.complete (excluding reinforcement)	Bd.W.2 Page Number582	Square Metre	537.00	272.00
1504	Building Miscellaneous Item	44.09	BDW 3	Providing and erecting 1.5 metre high wire fencing with seven rows of barbed wire supported on M.S.Angles (50mm x 50mm x 6mm) at 2.5 Metres, Center to center including excavating pits for foundqtion, fixing post in cement cocrrete 1:4:8 of size 45 x 45 x 45 cm fastening the wire and painting the M.S.Angles with one coat of red lead primer and two coats of painting etc.complete.	Bd.W.3 Page Number583	Running Meter	613.00	205.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1505	Building Miscellaneous Item	44.10	BDW 6	Providing and fixing mild steel grill gate with angle iron frame 65mm x 65mm x 10mm with iron bars at 150mm C/C and diagonal flats as per the detailed drawing including hinges, pivot block locking arrangement, welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kilogram/Smt.	Bd.W.6 Page Number585	Square Metre	2548.00	492.00
1506	Building Miscellaneous Item	44.11	BDW 7	Providing and fixing 90 cm x 60 cm Marble plate engraving 10 cm. height letter, figures including painting the lefters/figures with approved colour and shade complete	Bd.W.7 Page Number586	Number	7355.00	1430.00
1507	Building Miscellaneous Item	44.12	BDW 7	Providing and fixing 90 cm x 60 cm Granite plate engraving 10 cm. height letter, figures including painting the lefters/figures with approved colour and shade complete	Bd.W.7 Page Number586	Number	7983.00	1430.00
1508	Building Miscellaneous Item	44.13	BDW	Providing and erecting 1.2 meter high wire fencing with five rows of barbed wire supported on mild steel angle (50 x 50x 6mm) post at 2.5 m c/c including excavation of pits of foundation concrete fixing the posts in (1:4:8) cement concrete block of 45x45x45 cm and fastening the Wires and painting the angles with one coat with red lead primer and two coats of oil painting etc.complete	Bd.W.3 Page Number583	Running Meter	669.00	199.00
1509	Building Miscellaneous Item	44.14	BDW	Providing and fixing rain tattis with bamboos and karve grass with 75 mm thick grass and removing the same after rain is over (size of bamboos 50 mm to 75mm dia and 3 M to 3.5 M long)	As directed by Engineer in charge.	Square Metre	103.00	54.00
1510	Building Miscellaneous Item	44.15	BDW	Providing and fixing grass chhapper (roof) with necessary bamboos and karve frame with 75mm. thick grass etc.removing the same after rain is over (size of bamboos 50mm to 75mm dia and 3 M to 3.5M long)	As directed by Engineer in charge.	Square Metre	112.00	54.00
1511	Building Miscellaneous Item	44.16	BDW	Providing and fixing grass chhapper (roof) with necessary bamboos and karve frame with 75mm. thick grass etc.removing the same after rain is over (size of bamboos 25mm dia and 3 M to 3.5 M long)	As directed by Engineer in charge.	Square Metre	126.00	68.00
1512	Building Miscellaneous Item	44.17	BDW	Providing and fixing Bamboo Matting screen for partition with bamboo sticks	As directed by Engineer in charge.	Square Metre	197.00	129.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1513	Building Miscellaneous Item	44.18	BDW	Providing and fixing lightning conductor system comprising of erecting Air-Termination consisting of tubular copper rod of 25mm dia. 1.2 mm thick with multiple points head 1.2 mt. long (Heavy Duty) welded or clamped to G.I. pipe pole B grade 50 mm dia of required length with M.S. round base plate 25 Cm diam and 10mm thick at bottom embedded in cement concrete 1:3:6 foundation of size 45 cm diam x 45 cm Height and providing earthing with copper earth plate of size 60 x 60 x 0.3 cms with cadmium plated nut bolts to fix earthing strip buried in specially prepared earth pits 1.5 metre below ground level with 40Kilogram charcoal and salt with alternate layers of charcoal and salt and G.I. pipe 40mm dia 2 meter length buried in earth upto earthing plate remaining portion above ground level for watering and refilling complete Note- Copper strip from lightning conductor is not considered in this item.	BDW 1 Page 581	Number	22186.00	5091.00
1514	Building Miscellaneous Item	44.19	BDW	Providing and fixing copper strip 25mm wide and 3mm thick for lightning conductor including fixing with screws required scaffolding etc. complete Note- Lightning conductor and earthing pits is not considered in this item	BdW 1 Page 581 as directed Engineer in Charge	Running Meter	652.00	265.00
1515	Building Miscellaneous Item	44.20	BDW	Providing and fixing in position aluminium strips of size 50mm x 3mm for nosing the steps including fixing with screws and raval plugs, bending and cutting to the required shape and size, finishing with paint, necessary mortar bedding of 1:3 cement mortar to get exact line and level including watering and curing etc. complete	As directed by Engineer in charge.	Running Meter	248.00	168.00
1516	Building Miscellaneous Item	44.21	BDW	Providing and fixing crimped with G.I. mesh and size 20 mm x 20mm 10 gauge to iron angle frame including welding crimp mesh to angle frame and steel flat, fixing the frame in its original position and oil painting etc. complete (excluding cost of structural steel)	As directed by Engineer in charge.	Square Metre	624.00	322.00
1517	Building Miscellaneous Item	44.23	BDW	Providing and fixing welded mesh fabric for guniting of mesh size 75 mm x 75mm and 10 gauge thick including scaffolding etc. complete	As directed by Engineer in charge.	Square Metre	858.00	301.00
1518	Building Miscellaneous Item	44.24	BDW	Providing and fixing welded mesh fabric for guniting of mesh size 150mm x 150mm and 10 gauge i.e. 3.25mm thick including scaffolding etc. complete	As directed by Engineer in charge.	Square Metre	825.00	301.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1519	Building Maintenance	46.01	BDW 8-2	Removing double country tiled roof with ridge and with battens and stacking the materials as directed with all leads and lifts, complete including removing wood work below etc. complete	Bd.W.8 Page Number587	Square Metre	102.00	102.00
1520	Building Maintenance	46.02	BDW 8-4	Removing planking from roof or ceiling and stacking them sa directed with all leads and lifts etc. complete	Bd.W.8 Page Number587	Square Metre	45.00	45.00
1521	Building Maintenance	46.03	BDW 8-5A	Removing Queen Post truss from roof and stacking the materials as directed with all leads and lifts etc. complets	Bd.W.8 Page Number587	Number	1631.00	1631.00
1522	Building Maintenance	46.04	BDW 8-5B	Removing King Post truss from roof and stacking the materials as directed with all leads and lifts etc. complets	Bd.W.8 Page Number587	Number	1064.00	1064.00
1523	Building Maintenance	46.05	BDW 8-5C	Removing other type truss below 5 metres span from roof and stacking the materials as directed with all leads and lifts etc. complets	Bd.W.8 Page Number587	Number	798.00	798.00
1524	Building Maintenance	46.06	BDW 8-8	Dismantling flat wooden or A.C. Sheet ceiling with frame work including stacking the materials as directed with all leads, lifts etc. complete.	Bd.W.8 Page Number587	Square Metre	55.00	55.00
1525	Building Maintenance	46.07	BDW 8-9	Removing cloth ceiling including frame work and stacking the materials as ditected with all leads, lifts etc. complete	As directed by Engineer in charge.	Square Metre	27.00	27.00
1526	Building Maintenance	46.08	BDW 8	Dismantling brick masonry in Mud and stacking the materials as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Cubic metre	237.00	237.00
1527	Building Maintenance	46.09	BDW 8	Dismantling brick masonry in lime or cement mortar and stacking the materils as directed with all leads, lifts etc.	As directed by Engineer in charge.	Cubic metre	305.00	305.00
1528	Building Maintenance	46.10	BDW 8	Dismantling stone masonry in Mud including stacking the materials as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Cubic metre	244.00	244.00
1529	Building Maintenance	46.11	BDW 8	Dismantling stone masonry in lime or cement mortar including stacking the materils as directed with all leads, lifts etc.	As directed by Engineer in charge.	Cubic metre	346.00	346.00
1530	Building Maintenance	46.12	BDW 8	Removing lime or lean cement concrete including stacking the spoils as directed with all leads, lifts etc, complete.	As directed by Engineer in charge.	Cubic metre	508.00	508.00
1531	Building Maintenance	46.13	BDW 8	Removing rich mix cement concrete including stacking the spoils as directed with all leads, lifts etc, complete.	As directed by Engineer in charge.	Cubic metre	847.00	847.00
1532	Building Maintenance	46.14	BDW 8	Removing brick bat coba including stacking the spoils as directed with all leads, lifts etc, complete.	As directed by Engineer in charge.	Cubic metre	576.00	576.00
1533	Building Maintenance	46.15	BDW 8	Removing doors and windows with frames and stacking the materials as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Number	142.00	142.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1534	Building Maintenance	46.16	BDW 8	Removing ventilators and small windows with frame and stacking the materials with all leads, lifts etc. complete.	As directed by Engineer in charge.	Number	121.00	121.00
1535	Building Maintenance	46.17	BDW 8	Removing wooden or A.C. partition including frame work and stack-ing the materials as with all leads, lifts etc. complete.	As directed by Engineer in charge.	Square Metre	37.00	37.00
1536	Building Maintenance	46.18	BDW 8	Removing teak wood trellies work with frame including stacking the materials as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Square Metre	30.00	30.00
1537	Building Maintenance	46.19	BDW 8	Removing cement tiles, or marble or polished shahabad floor or dado without bed concrete including stacking the materials as directed with all leads, lifts etc. complete	As directed by Engineer in charge.	Square Metre	41.00	41.00
1538	Building Maintenance	46.21	BDW 8	Dismantling wooden floor including beams and joists, stacking the materials as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Square Metre	33.00	33.00
1539	Building Maintenance	46.23	BDW 8	Removing mud plaster including disposing of the spoils as directed with all leads, lifts etc, complete.	As directed by Engineer in charge.	Square Metre	14.00	14.00
1540	Building Maintenance	46.24	BDW 8	Removing wire fencing with wooden post and stacking the material with all leads, lifts etc. complete.	As directed by Engineer in charge.	Running Metre	45.00	45.00
1541	Building Maintenance	46.25	BDW 8	Removing wire fencing with iron/ C.C. fencing post and stacking the materials as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Running Metre	61.00	61.00
1542	Building Maintenance	46.26	BDW 8	Removing iron pipe raling having wooden R.C.C. or C.C. or iron post and stacking the materials as directed etc. complete.	As directed by Engineer in charge.	Running Metre	63.00	63.00
1543	Building Maintenance	46.27	BDW 8	Removing earthen, stonewate pipe and stacking them as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Running Metre	20.00	20.00
1544	Building Maintenance	46.28	BDW 8	Removing cast iron or wrought iron or A.C. pipe and stacking them as directed with all leads, lifts etc. complete.	As directed by Engineer in charge.	Running Metre	20.00	20.00
1545	Building Maintenance	46.29	BDW 8	Dismantling the R.C.C. Work 1:2:4 and sorting out the materials such as steel etc. as directed and stacking them within the specified lead as directed etc. complete.	As directed by Engineer in charge.	Cubic metre	1321.00	1321.00
1546	Building Maintenance	46.30	BDW 8	Removing Np-2 and Np-3 class pipes including stacking at road side as directed by the Engineer in charge. Upto 900mm dia. etc complete.	As directed by Engineer in charge.	Running Metre	230.00	90.00
1547	Building Maintenance	46.31	BDW 8	Removing Np-2 and Np-3 class pipes including stacking at road side as directed by the Engineer in charge. Upto 900mm dia and above. etc complete.	As directed by Engineer in charge.	Running Metre	298.00	158.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1548	Building Maintenance	46.32	BDW 8	Removing single country tiled roof with battens and stacking the materials as directed with all leads and lifts etc. complete.	As directed by Engineer in charge.	Square Metre	64.00	64.00
1549	Building Maintenance	46.33	BDW 8	Removing battens from roof and stacking them as directed with all leads and lifts etc. complete.	As directed by Engineer in charge.	Running Metre	8.00	8.00
1550	Building Maintenance	46.34	BDW 8	Removing matting from roof and stacking as directed with all leads and lifts etc. complete.	As directed by Engineer in charge.	Square Metre	18.00	18.00
1551	Building Maintenance	46.35	BDW 8	Removing purlins from roof including stacking as directed with all leads , lifts etc. complete.	As directed by Engineer in charge.	Running Metre	19.00	19.00
1552	Building Maintenance	46.36	BDW 8	Removing rafters from roof including the materials as directed with all leads , lifts etc. complete.	As directed by Engineer in charge.	Running Metre	19.00	19.00
1553	Building Maintenance	46.37	BDW 8	Removing cloth partition with frame work and stacking the materials as directed with all leads , lifts etc. complete.	As directed by Engineer in charge.	Square Metre	17.00	17.00
1554	Building Maintenance	46.38	BDW	Providing and fixing Jute Kantan (Tarat) screen to the scaffold-ing for external guniting as directed including removing the same after the work is over etc. complete.	As directed by Engineer in charge.	Square Metre	57.00	17.00
1555	Building Maintenance	46.39	BDW	Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, includind excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.	As directed by Engineer in charge.	Running Metre	1953.00	297.00
1556	Building Maintenance	46.40	BDW	Removing urinal pans or wash hand basins with frame including disconnecting the sanitary and water supply connections, removing the same carefully and stacking the serviceable materials as and where directed including throwing the unserviceable materials outside etc complete	As directed by Engineer in charge.	Number	87.00	87.00
1557	Building Maintenance	46.41	BDW	Removing W.C. pans including disconnecting the sanitary and water supply connections, removing and breaking flooring and bed con-crete around pan removing the same carefully and stacking the serviceable materials as adn where directed including throwing the unserviceable materiasls out side etc. carefully and throwing out the refusal outside etc. complete.	As directed by Engineer in charge.	Number	189.00	189.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1558	Building Maintenance	46.42	BDW	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/structure, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube challis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/ or pointing and/ or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in-charge. Note:- (1) The elevational area of the scaffolding shall be measured for payment purpose. (2) The payment will be made once only for execution of all items for such works.	As directed by Engineer in charge.	Square Metre	187.351032	187.351032
1559	Building Maintenance	46.43	BDW	Removing Manglore tiled roof and ridge tiles with battens, ridge and barge boards, eaves 8 A boards etc and sacking the materials as directed with all leads and lifts complete. Including removing wood work below etc. complete.	As directed by Engineer in charge.	Square Metre	105.00	105.00
1560	Building Maintenance	46.44	BDW	Providing and erecting 1.5 metre high wire fencing with seven rows of barbed wire supported on M.S. Angles (50 mm x 50 mm x 6 mm) at 2.5 metres centre to centre including excavating pits for foundation, fixing posts in cement concrete of size 45 x 45 x 45 cm, fastening the wire and painting the M.S. Angles with one coat of red lead primer and two coats of painting etc. complete.	Bd.W.3 Page Number583	Running Meter	697.00	207.00
1561	Building Maintenance	46.45	BDW	Providing and erecting 1.5 metre high wire fencing with seven rows of barbed wire supported on wooden post of specified size at 2.5 M C/C including excavating pits for foundation, fixing post in cement concrete 1:4:8 block of concrete of size 45 x 45 x 45 cm fastening the wire and coal tarring wooden post in two coats etc. complete.	Bd.W.4 Page Number583	Running Meter	714.00	207.00
1562	Building Maintenance	46.46	BDW	Replacement of damaged alluminium Butt Hinges of 125 mm of approved quality and make to door shutter including removing existing the same in original position making proper adjustment for smooth operation etc. complete as per sample approved by Engineer incharge.	As directed by Engineer in charge.	Number	244.00	89.00
1563	Building Maintenance	46.47	BDW	Replacement of damaged Mortise Lock of approved quality and make to door shutter including Removing and Refixing with Necessary screw, making proper adjustment for smooth operation etc. complete as per sample approved by Engineer in-chareg.	As directed by Engineer in charge.	Number	1118.00	113.00
1564	Building Maintenance	46.48	BDW	Replacement of damaged Aldrop 300 mm Chromium plated of approved quality and make to door shutter including removing existing the same in original position making proper adjustment for smooth operation etc. complete as per sample approved by Engineer in-charge.	As directed by Engineer in charge.	Number	317.00	47.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1565	Building Maintenance	46.49	BDW	Replacement of damaged Aldrop 300 mm Iron Oxidised of approved quality and make to door shutter including removing existing the same in original position making proper adjustment for smooth operation etc. complete as per sample approved by Engineer in-charge.	As directed by Engineer in charge.	Number	268.00	47.00
1566	Building Maintenance	46.50	BDW	Replacement of damaged Tower Bolt 300 mm Chromium plated of approved quality and make to door/window shutter including removing existing the same in original position making proper adjustment for smooth operation etc. complete as per sample approved by Engineer in-charge.	As directed by Engineer in charge.	Number	158.00	23.00
1567	Building Maintenance	46.51	BDW	Replacement of damaged Alluminium Handle 125 mm of approved quality and make to door/window shutter including removing existing the same in original position making proper adjustment for smooth operation etc. complete as per sample approved by Engineer in-charge.	As directed by Engineer in charge.	Number	152.00	47.00
1568	Building Maintenance	46.52	BDW	Replacement of damaged Lock of approved quality and make to cupboard and doorwer including Removing and Refixing with necessary screw, making proper adjustment for smooth operation etc. complete as per sample approved by Engineer in-charge.	As directed by Engineer in charge.	Number	188.00	23.00
1569	Building Maintenance	46.53	BDW	Removing chokes and leakages from down take G.I/CI/PVC pipe line on walls floor level by using zoola / scaffolding and rectify the same for functioning with all lifts etc. complete.	As directed by Engineer in charge.	Number	286.00	286.00
1570	Building Maintenance	46.54	BDW	Manualy clearing the chokes from under ground drainage line including Inspection chambers with the help of required tools for propre functioning line chamber to chamber etc. complete.	As directed by Engineer in charge.	Running Metre	45.00	45.00
1571	Building Maintenance	46.55	BDW	Manualy clearing by removeing the chokes from Nahni Trap, Gully Trap, Wash basin unit, Sink and WC with the help of required tools for proper functioning the same etc. complete.	As directed by Engineer in charge.	Number	169.00	169.00
1572	Building Maintenance	46.56	BDW	Filling tiles joint portion of flooring and dado filling with white cement by removing existing loose mortar/ cement slurry from joint with tools and finish with washing cleaning and curing etc. complete.	As directed by Engineer in charge.	Square Metre	208.00	179.00
1573	Building Maintenance	46.57	BDW	Providing and fixing 6 mm thick commercial plywood with jungle wood frame work of 50 x 35 mm size at 60 cm on both ways for closing the window portion/openings for protection from falling debris, dust etc. including cutting, fixing with nails and removing after the same after completion of the work. (To be used after approval of Superintending Engineer)	As directed by Engineer in charge.	Square Metre	940.00	199.00
1574	Building Maintenance	46.58	BDW	Removal of plants / ficus grown by pulling out root system embedded in masnory, cutting stem and application of high/gur/lime formulation as specified by the Architect or other patented chemical biocide treatment such as biocide 'Glycel' (iso proplamine salt of glyphosate) or other chemical as specified by the Engineer in charge etc. complete.	As directed by Engineer in charge.	Number	179.00	75.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1575	Building Maintenance	46.59	BDW	Lowering down the debris obtained from breaking and removing the cement plaster / burnt brick masonry of the first floor by any means without causing dust nuisance and damage to structure, stacking the same as and where directed including cleaning the site complete.	As directed by Engineer in charge.	Cubic metre	684.00	684.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1576	Structural Strengthening	47.01	BDSS	Providing & Applying chemical for cleaning the exposed steel structure, TMT bars, etc. of structure by grinding the surface by grinder machine, wire brush, removing existing corrosion from the metal also removing loose particles, of the area by water jet, (using other mechanical / manual means) and apply on prepared surface of DuraGuard- as corrosion preventive coat on prepared TMT bars, steel structure, metal surface etc. to protect it from corrosion etc. as per manufacturer's specification (using other manual / mechanical means) after that Providing and applying high abrasive resistant, self curing, UV resistant, impermeable ,high strength, non shrink, Poly Ironite Ceramic Cementitious (PICC) repair mortar resurfacing on concrete surface of thickness up to 10 mm including breaking honey comb area, (using manual/mechanical means) , clean the concrete surface with special chemical clonon with pressure water jet for removing of algae fungi, apply bond coat Kelox water misible epoxy before PICC application with all leads and lifts, Material, Machinery, labour, scaffolding, etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Square Metre	3828.00	503.00
1577	Structural Strengthening	47.02	BDSS	Providing and grouting the holes by Poly Ceramic Cementitious i.e NicGrout G 06 + 53 grade cement material of as per requirement to reduce the porosity of concrete / Masonry structure and to increase the strength of structure using grouting pipes , grouting m/c, mixer etc and all relevant safety with all leads and lifts, material, machinery, labour, etc. Complete as per specification and as directed by Engineer-in-Charge.	As directed by Engineer in charge.	Kilogram	76.00	30.00
1578	Structural Strengthening	47.03	BDSS	Providing and applying high abrasive resistant, UV resistant, impermeable ,self curing, high strength, non shrink, Poly Ironite Ceramic Cementitious (PICC) repair mortar for water proofing on concrete surface with thickness up to 5 mm, , apply bond coat Kelox Water Misible epoxy before PICC application (using manual/mechanical means) and Providing and Applying PCC up to 50 mm thickness for desire slope to drain the water and kept ponded for continuous period of 3 days to detect any seepage / leakage/ dampness if any, the surface then shall be cleared, complete as per specification including cost of all materials, machinery, labour, insurance charges as directed by the Engineer in charge.	As directed by Engineer in charge.	Square Metre	1464.00	173.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1579	Structural Strengthening	47.04	BDSS	PICC Coating for concrete Bridge repair work :-Providing and applying Poly Ironite Ceramic Cementitious (PICC) material of Self curing ,High Abrasion resistant , Non shrink ,High strength,UV resistant, repair mortar coating on bond coat Kelox water missable epoxy of on concrete surface upto 10 mm thickness including Cleaning the concrete surface of bridge by grinding the surface by grinder machine with wire brush /diamond wheel, removing existing loose particles etc. by using grinder, wire brush,breaker machine, water jet(using other mechanical / manual means) also removing of algae fungi by special chemical of clonon etc.complete with all leads and lifts, Material, Machinery, Labour, Scaffolding etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Square Metre	4975.00	1159.00
1580	Structural Strengthening	47.05	BDSS	Removal of Vegetation/Plants:- Removal of entire root inside the bridge portion. Remains of the root shall be treated with special chemical Steripure MBT 20. Top 50 mm shall filled with high strength grout including cost of all material, machinery, labour, scaffolding, etc.as per specification and as directed by Engineer-in-Charge.	As directed by Engineer in charge.	Square Metre	1543.00	596.00
1581	Structural Strengthening	47.06	BDSS	Providing & Applying DuraClean- WR for cleaning the TMT bars, steel structure etc. of structure by Waterjet cleaning/ grinding the surface by grinder machine, wire brush, removing existing corrosion from the metal surface also removing loose particles(using other mechanical / manual means) and apply on prepared surface of DuraGuard - as corrosion preventive coat on prepared TMT bars, steel structure,metal surface etc. to protect it from corrosion etc. as per manufacturer's specification (using other manual / mechanical means) complete as per specification including cost of all materials, machinery, labour, insurance charges as directed by the Engineer in charge.	As directed by Engineer in charge.	Square Metre	1461.00	76.00
1582	Structural Strengthening	47.07	BDSS	PICC filling for Honey combing area at concrete surface:-Providing and applying Poly Ironite Ceramic Cementitious (PICC) material of Self curing ,High Abrasion resistant , Non shrink ,High strength,UV resistant, repair mortar coating on Kelox water missable epoxy of concrete surface fill the honey combing area etc. on tacky primer coat upto 10 mm thickness or as per the surface conditions including Cleaning the concrete surface of bridge by grinding the surface by grinder machine with wire brush /diamond wheel, removing existing loose particles etc. by using grinder, wire brush,breaker machine, water jet(using other mechanical / manual means) also removing of algae fungi by special chemical of clonon. etc.complete with all leads and lifts, Material, Machinery, Labour, Scaffolding etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Square Metre	5335.00	1542.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1583	Structural Strengthening	47.08	BDSS	Providing and applying Poly Ironite Ceramic Cementitious (PICC) of self curing, a high abrasion resistant, non-shrink, high strength, low porosity, UV resistant repair mortar on Concrete road etc including cleaning the Concrete surface on concrete road by breaking, cleaning with wire brush, removing existing loose particles etc. by using wire brush, breaker machine, air (using other mechanical / manual means) then applying Kelox (water miscible epoxy) of , bond coat on prepared concrete surface for bonding the old surface to new repair mortar etc. as per manufacturer's specification (using other manual / mechanical means) then apply repair mortar of PICC to fill the concrete surface upto 15 mm coat etc. complete with all leads and lifts, Material, Machinery, Labour etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Square Metre	5128.00	371.00
1584	Structural Strengthening	47.09	BDSS	Providing and applying Poly Ironite Ceramic Cementitious (PICC) of self curing, a high abrasion resistant, non-shrink, high strength, low porosity, UV resistant repair mortar on Concrete road etc including cleaning the Concrete surface on concrete road by breaking, cleaning with wire brush, removing existing loose particles etc. by using wire brush, breaker machine, air (using other mechanical / manual means) then applying Kelox (water miscible epoxy) of , bond coat on prepared concrete surface for bonding the old surface to new repair mortar etc. as per manufacturer's specification (using other manual / mechanical means) then apply repair mortar of PICC to fill the concrete surface upto 25 mm coat etc. complete with all leads and lifts, Material, Machinery, Labour etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Square Metre	7136.00	361.00
1585	Structural Strengthening	47.10	BDSS	Providing and applying Poly Ironite Ceramic Cementitious (PICC) of self curing, a high abrasion resistant, non-shrink, high strength, low porosity, UV resistant coating mortar on existing GSB of 100 mm thickness, get levelled the surface and cure then applying self curing coating PICC mortar for 50 mm thickness after stamp the surface by special concrete stamping mold as per specified texture and colour etc. complete with all leads and lifts, Material, Machinery, Labour etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Square Metre	3028.00	100.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1586	Masonry Bridge Repair	47.11	BDSS	Masonry Bridge repair work:-Providing pointing on masonry surface of Bridge with UV resistance, Non-shrink. high strength, high abrasion, material like Poly Ironite Ceramic Cementitious (PICC) self curing cementitious material for masonry joint filling to depth of 20mm including pointing work of masonry by removing of existing loose portion of stone masonry by braking removing existing loose particles upto required depth 50 mm or as per site confition cleaning with special chemicals clonon and water jet under pressure for removing algae, fungi, applying bond coat Kelox water missable epoxy before repair material application complete as per specification including cost of all material, machinery, labour,scaffolding, transportation etc. with all leads and lifts as directed by the engineer-in-charge.	As directed by Engineer in charge.	Square Metre	5620.00	1483.00
1587	Structural Strengthening	47.12	BDSS	Providing & Applying DuraClean- WR - for cleaning the TMT bars, steel structure etc. of structure by Waterjet cleaning/ grinding the surface by grinder machine, wire brush, removing existing corrosion from the metal surface also removing loose particles(using other mechanical / manual means) and apply on prepared surface of DuraCap 2 coats corrosion preventive coat on prepared TMT bars, steel structure,metal surface etc. to protect it from corrosion etc. as per manufacturer's specification (using other manual / mechanical means) complete as per specification including cost of all materials, machinery, labour, insurance charges as directed by the Engineer in charge.	As directed by Engineer in charge.	Square Metre	518.00	21.00
1588	Bitumen and concrete road Pot Hole Repairing	47.13	BDSS	Providing and applying Poly Ironite Ceramic Cementitious (PICC) of self curing, a high abrasion resistant, non-shrink, high strength,low porosity, UV resistant repair mortar to fill the pot holes on Concrete/Bitumen road including cleaning the pot holes on concrete/Bitumen road by breaking, clean with wire brush , Air blower, removing existing loose particles etc. by using wire brush,breaker machine, air jet(using other mechanical / manual means) then applying Kelox water missiable epoxy bond coat on prepared concrete/Bitumen surface pot hole for bonding the old surface to new repair mortar etc. as per manufacturer's specification (using other manual / mechnical means) then apply repair mortar to fill the pot holes on concrete/Bitumen surface upto 75 mm depth to match existing road thickness etc. Complete with all leads and lifts, Material, Machinery, Labour etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Kilogram.	56.00	3.64

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1589	Bitumen and concrete road Pot Hole Repairing	47.14	BDSS	Providing and applying Poly Ironite Ceramic Cementitious (PICC) of self curing, a high abrasion resistant, non-shrink, high strength, low porosity, UV resistant repair mortar to fill the pot holes on Concrete/Bitumen road including cleaning the pot holes on concrete/Bitumen road by breaking, clean with wire brush, Air blower, removing existing loose particles etc. by using wire brush, breaker machine, air jet (using other mechanical / manual means) then applying Kelox water miscible epoxy bond coat on prepared concrete/Bitumen surface pot hole for bonding the old surface to new repair mortar etc. as per manufacturer's specification (using other manual / mechanical means) then apply fast setting repair mortar to fill the pot holes on concrete/Bitumen surface upto 75 mm depth to match existing road thickness etc. & movement the vehical within 1 hour. complete with all leads and lifts, Material, Machinery, Labour etc. complete as per specification and as directed by engineer-in-charge.	As directed by Engineer in charge.	Kilogram.	149.00	3.64
1590	Structural Strengthening	47.15	BDSS	Providing and applying 30 mm thick self curing Ceramic Polymer Microconcrete of approved make having Compressive strength above M30, non shrink, impermeable, filling mortar to load carrying R.C.C member in two layers on cleaned concrete surface, including honey comb area (using manual/mechanical means). Mixing mortar of Nicosil C80 and fresh 53 grade cement with required water cement ratio for desired consistency and applying and finishing by manual trowelling, curing after curing initial setting time etc, as per manufacturers specification etc. complete as per specification and as directed by engineer-in-charge. Work shall be executed by certified applicator only and work shall be guaranteed for 5 years and guarantee shall be provided on Rs. 500 /- stamp paper. (Bond coat mentioned below is to be done before coating)	As directed by Engineer in charge.	Square Metre	2368.00	190.00
1591	Structural Strengthening	47.16	BDSS	Providing and applying Kelox R 101 (Resin) + Kelox H 404 (Hardner) water miscible epoxy of approved make for bonding old concrete to new mortar after mixing slowly in predefined ratio and applying by brush on the surface, when it is tacky then apply the mortar complete as per specification and as directed by engineer-in-charge. Work shall be executed by certified applicator only and work shall be guaranteed for 5 years and guarantee shall be provided on Rs. 500 /- stamp paper	As directed by Engineer in charge.	Square Metre	721.00	72.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2019-20 GREEN BUILDING								
1592	Masonry	48.01		Providing and constructing non load bearing wall with 200mm Horizontally perforated clay hollow blocks of approved make with compressive strength not less than 35 Kilogram/Sqcm, U value of 47.0 W/m2K, Water Absorption of 15%, masonry to be done using fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) cement mortar 1:6 with blocks of size 400mm x 200mm x 200mm (12.5 bricks per Square Metre. excluding mortar joint thickness) including cost of materials, labour charges, scaffolding, curing at all heights, complete as per specifications & directions of Engineer-in Charge. Cost shall be inclusive of filling the Blocks with Cement mortar at exposed junctions and filling with concrete using 12mm down size aggregates at Window and door Jambs for fixing hold fast, anchors etc.	As directed by Engineer in charge	Square Metre	1820	466
1593	Masonry	48.02		Providing and constructing non load bearing wall with 150mm Horizontally perforated clay hollow blocks of approved make with compressive strength not less than 35Kilogram/Sqcm, U value of 47.0 W/m2k, Water Absorption of 15%, with cement mortar 1:6 with blocks of size 400mm x 150mm x 200mm (12.5 bricks per Sq.m excluding mortar joint thickness) including cost of materials, labour charges, scaffolding, curing at all heights, complete as per specifications & directions of Engineer-in Charge. Cost shall be inclusive of filling the Blocks with Cement mortar at exposed junctions and filling with concrete using 12mm down size aggregates at Window and door Jambs for fixing hold fast, anchors etc.	As directed by Engineer in charge	Square Metre	1530	426
1594	Masonry	48.03		Providing and constructing non load bearing wall with 100mm Horizontally perforated clay hollow blocks of approved make with compressive strength not less than 35Kilogram/Sq.cm, U value of 47.0 W/m2k, Water Absorption of 15%, with cement mortar 1:6 with blocks of size 400mm x 100mm x 200mm (12.5 bricks per Square Metre. excluding mortar joint thickness) At every 5th course level, Concrete band of 100mm thick with 1:3:6 Mix Concrete along with Nominal Reinforcement to be provided. The rate inclusive of cost of materials, labour charges, scaffolding, curing at all height, complete as per specifications & directions of Engineer-in Charge. Cost shall be inclusive of filling the Blocks with Cement mortar at exposed junctions and filling with concrete using 12mm down size aggregates at Window and door Jambs for fixing hold fast, anchors etc.	As directed by Engineer in charge	Square Metre	1331	386

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1595	Flooring	48.04		Providing and laying 18 mm thick ADONI BROWN LEATHER FINISH stone for flooring, machine cut in required size, approved shade, color and texture laid using white cement slurry over 20 mm (average) thick base of cement mortar 1:4 followed by laying, fixing and jointed with white cement slurry mixed with matching pigment, including rubbing and curing moulding and polishing to edge to give high gloss finish etc complete. The application rate for tile adhesives shall be as per manufacturer's recommendations. as per detail drawing. The rate shall be inclusive of all labour, material, wastage, scaffolding, transportation, taxes, including all leads, lifts at all levels and as directed by Engineer in charge. Complete. a) Flooring	As directed by Engineer in charge	Square Metre	3599	150
1596	Flooring	48.05		Providing and laying 18 mm thick ADONI BROWN LEATHER FINISH stone for flooring, machine cut in required size, approved shade, color and texture laid using white cement slurry over 20 mm (average) thick base of cement mortar 1:4 followed by laying, fixing and jointed with white cement slurry mixed with matching pigment, including rubbing and curing moulding and polishing to edge to give high gloss finish etc complete. The application rate for tile adhesives shall be as per manufacturer's recommendations. as per detail drawing. The rate shall be inclusive of all labour, material, wastage, scaffolding, transportation, taxes, including all leads, lifts at all levels and as directed by Engineer in charge. Complete. a) Skirting	As directed by Engineer in charge	Square Metre	4536	909
1597	Flooring	48.06		Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength,thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer specifications & direction of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	As directed by Engineer in charge	Square Metre	1000.00	0.00

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1598	Flooring	48.07		Bamboowood 14 mm thick tile flooring including quater round, door reduces and plywood- Providing & fixing in position Phenol bonded Epitome Bamboowood flooring with planks of sizes 14mm thick, 1800mm length (minimum) and 130mm wide (minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (MBTPC). The flooring shall be fixed with tongue and groove interlocking system, with plywood of mr grade of 18mm thickness as base and underlayment of 4mm thick expanded poly ethylene foam sheets having density 40Kilogram/cum, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and dorr reducer of size 1900mm x 44mm, wherever required. The Epitome Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.	As directed by Engineer in charge	Square Metre	7325	210
1599	Flooring	48.08		Bamboowood 14mm thick Tile Flooring including quarter round & door reducer - Providing & fixing in position Phenol bonded Epitome Bamboowood flooring with planks of sizes 14mm thick, 1800mm length (minimum) and 130mm wide (minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building materials & Technology Promotion Council (BMTPC). The flooring shall be fixed with tongue and groove interlocking system, with 2mm underlay as sound abrobing and moisture barrier and underlayment of 4mm thick expanded poly ethylene foam sheets having density 40Kilogram/cum, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and dorr reducer of size 1900mm x 44mm, wherever required. The Epitome Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge	As directed by Engineer in charge	Square Metre	5646.00	210.00
1600	Flooring	48.09		Bamboowood 14mm thick wall Skirting - Providing & fixing in position Phenol bonded Epitome Bamboowood in wall skirting with planks of sizes 14mm thick, 1900mm length (minimum) and 85mm wide (minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building materials & Technology Promotion Council (BMTPC). The skirting shall be fixed SS screws & rawl plugs, over underlayment of 4mm thick expanded poly ethylene foam sheets having density 40Kilogram/cum, over prepared surface. The Epitome Bamboowood planks shall have minimum density 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge	As directed by Engineer in charge	Square Metre	6145.00	857.00

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1601	Flooring	48.10		Bamboowood 20mm thick Decking Outdoor Flooring Tile Providing & fixing in position Phenol bonded Epitome Bamboowood deck flooring tiles with planks of sizes 20mm thick, 1900 mm length and 135mm wide ,in approved colour , texture and finish , having performance Appraisal Certificate (PAC) issued by Building Materials& Technology promotion Council (BMTPC)with necessary profiled edges and groove fixed with 40mm ss screws 3 nos in each tile to frame work made of second class seasoned and treated teak wood of size 38x38 mm placed underneath across the tile at both ends and in centre fixed with clips holding in position. The Epitome Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum hardness 1000 Kilogramf.all complete as per direction of engineer in-charge.	As directed by Engineer in charge	Square Metre	10540	345
1602	Colouring	48.11		Providing and applying 2 coats of 100% Pure acrylic low VOC and APEO & HCHO free water based paint of approved colour that belongs to class 1 flame spread resistance of approved make Paint should provide durable and long lasting silk finish with a high crack tolerance of upto 1mm. Paint should have an outstanding washability with high resistance to wide range of bacteria and fungus. Paint has to be applied on smooth and uniform surface prepared by an acrylic copolymer low VOC & Odour putty. This surface should be primed with water based low VOC Primer. The work activity should cover all aspects of applying paints from surface preparation as directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	307	0
1603	Colouring	48.12		Providing and applying 2 Coats of 100% Pure acrylic water based paint with special heat reflectance property to withstand the harsh climate for period of atleast 10 years of approved make. Paint system should provide durable and long lasting finish with DFT of min 90 microns and should protect against concrete carbonation with R value of minimum 600 and equivalent concrete layer thickness value of min 150 cm. Paint should have breathability property and should be able to cover hairline cracks in the surface upto 0.5mm The paint has to be applied on a coat of high quality acrylic copolymer based alkali resistant primer with excellent penetrating properties including cleaning, with all leads and lifts at all levels etc complete, as directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	200	0

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1604	Colouring	48.13		Providing and applying 2 Coats of high quality acrylic copolymer matt latex low VOC emulsion paint of approved shade that gives smooth, flat and washable and durable finishing of approved make. Paint should have good flow levelling property with good colour retention and incan antibacterial property. Paint has to be applied on smooth and uniform surface prepared by an acrylic copolymer low VOC & Odour putty. This surface should be primed with water based low VOC acrylic copolymer based primer sealer that has incan antibacterial property. The work activity should cover all aspects of applying paints from surface preparation, filling to erecting and dismantling of scaffolding, finishing the surface etc as directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	142	0
1605	Colouring	48.14		Providing and applying 2 Coats of 100% Pure acrylic low VOC water based paint with to withstand for period of atleast 5 years of approved make. Paint should provide durable long lasting silk finish with high resistance to UV and resistance to spreading of flame. Paint should protect against concrete carbonation with R value of minimum 600 and ability to built cracks upto min 0.7mm. The paint has to be applied on High quality water based acrylic copolymer primer with good alkali resistance properties. With all leads and lifts at all levels etc. complete, as directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	200	0
1606	Colouring	48.15		Providing and applying impression 24 carrat Luxury paint of approved make & approved brand Emulsion paint to interior walls and ceilings of approved quality, colour and shade to new surface in two coats, including sub surface preparation by Acrylic putty and Acrylic primer coats including scaffolding, preparing the surface. etc. complete (Low VOC).	As directed by Engineer in charge	Square Metre	178	0
1607	Colouring	48.16		Providing and applying anti-peel paint of approved make & approved brand exterior Emulsion paint of approved quality, colour and shade to old and new surface in two coats, including exterior acrylic primer coat, scaffolding, preparing the surface etc. complete (Heat Reflective Paint).	As directed by Engineer in charge	Square Metre	200	0
1608	Colouring	48.17		Providing and applying top coat exterior paint to terrace of approved make, shade and quality and one coat of primer before applying textured paint including scaffolding if necessary preparing surface by thoroughly cleaning of oil, grease, dirt and other material and fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) preparing as required, etc. complete.	As directed by Engineer in charge	Square Metre	87	0
1609	Roofing	48.18		Providing & laying water proof treatment of terrace slab with B.B. Coba in all position with an average thickness of 150mm consisting specialised materials as per the manufactures specifications and covering 10 years guarantee on court fee stamp paper including all lead, lift, etc. complete.	As directed by Engineer in charge	Square Metre	1464	473

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1610	Roofing	48.19		Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM) C 1549 and ASTM C 1371 respectively, VOC less than 10 cc/gm. The coating thickness and the methodology of application shall strictly as per manufacturer's specifications and as approved by engineer in charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc, washing with water all complete. The contractor shall give guarantee for the performance of SRI and also the durability of coating, all complete as per direction of Engineer - in- incharge.	As directed by Engineer in charge	Square Metre	238	0
1611	Doors & Windows	48.20		Bamboowood paneling or paneling and glazing in paneled and glazed shutters for doors of 25 to 40mm thick. Providing & fixing in position Phenol bonded Bamboowood paneling of 10mm thick, in 25 to 40 mm thick paneled or paneled and glazed shutters for doors, windows, clerestorey windows in approved colour, texture & finish. The bamboo wood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. The panels shall have profiled interlocking system locked in place with bamboo pins, all complete as per direction of the Engineer incharge and (Area of opening for panel inserts excluding portion inside grooves or rebates)	As directed by Engineer in charge	Square Metre	3583	650
1612	Doors & Windows	48.21		Bamboowood paneled or paneled and glazed Shutters of Doors Providing of fixing, in position Phenol bonded Bamboowood panelled or paneled and glazed shutters for doors, windows, clerestorey windows with pre-molded 30mm thick planks, in approved colour, texture & finish. It shall have 10mm wide, 25mm deep groove to fit in panels. The bamboowood shall have minimum density of 1000 Kilogram/cum, minimum Hardness 1000 Kilogramf. All styles and rails shall have profiled interlocking system locked in place by bamboo pins, all complete as per direction of Engineer in-charge (The paneling will be paid for separately)	As directed by Engineer in charge	Square Metre	5372	206
1613	Doors & Windows	48.22		Providing and fixing in position U.P.V.C.(Unplasticized Poly Vinyl Chloride) having multi-chambered outer frame section (73 x 50)mm with an outer wall thickness of 2mm & steel reinforcement, multi-chambered slider frame (73x 60) mm with steel reinforcement, multi-chambered slider sash (46x 82) mm with steel reinforcement designed to give optimum strength, 5 mm thick toughened double glass with 12 mm spacer of good quality including aluminium track, Inter-locking profile, coextruded beadings, EPDM gaskets, silicon sealant, sliding handle, fixtures and fastenings (couplings, hinges) including with all required screws and nuts with all necessary U.P.V.C. sections as per the detailed drawing and as directed by Engineer-In-Charge etc. complete.	As directed by Engineer in charge	Square Metre	9462	0

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1614	Doors & Windows	48.23		Sliding Window- 3 Track (2 Glass shutter + 1 flymesh) of approved make with DGU, providing and fixing of Sliding Window- 3 Track (2 Glass shutter + 1 flymesh). For details refer to Specifications. As directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	16791	1686
1615	Doors & Windows	48.24		Providing & fixing of Casement fixed window of approved make with DGU. The extruded aluminium sections of Alloy 6063 tolerances confirming to DIN standard from approved raw material V2 / V4 as directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	18394	1686
1616	Plumbing	48.25		Providing and fixing sink cock with regular swinging spout (Wall Mounted Model) with wall flange with approved make including other necessary fitting, etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	2109	222
1617	Plumbing	48.26		Providing and fixing sink cock with regular swinging spout (Wall Mounted Model) with wall flange with approved make including other necessary fitting, etc complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	1594	37
1618	Plumbing	48.27		Providing and fixing C.P. 2 Way BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	2109	222
1619	Plumbing	48.28		Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	2173	219
1620	Plumbing	48.29		Providing and fixing Hand shower (health faucet) with 8mm dia. 1m long flexible tube having wall hook with approved make including necessary sockets/ union nut etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	1852	219
1621	Plumbing	48.3		Providing and fixing white european type wall-hung, of size 360mm x 360mm x 575mm with flush valve of approved make including soil pipe, vent pipe upto outside face of wall, 100mm dia C.I. plug bend inlet pipe all fittings, cutting & making good walls, floors etc as directed by Engineer in charge.	As directed by Engineer in charge	Number	17797	624
1622	Plumbing	48.31		Providing and fixing white glazed urinal of series with Pressmatic auto closing valve of having 32mm diameter P.V.C. flush pipe with fitting and flushing of approved make and arrangement including lead soil pipe, lead trap & soil pipe connection upto the outside face of wall etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	10323	624
1623	Plumbing	48.32		Providing and fixing wall hung white wash basin of size 350x450x165mm with approved make pillar cock, C.P. Angular stop cock long thread approved make continental including SS bottle trap of approved make having necessary pipe connection up to the outside face of the wall etc complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	6090	624
1624	Plumbing	48.33		Providing and fixing Shower Head with shower arm of approved make shower tube hand shower with diverter of spout including all necessary pipe fittings and connections etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	16388	624

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1625	Plumbing	48.34		Providing and fixing Shower Head, with shower arm of approved make mixer of including all necessary pipe fittings and connections etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	6641	624
1626	Plumbing	48.35		Providing and fixing Oval Type Under Counter Wash Hand Basin of 420 x 590 x 195mm size with pillar cock, C.P.Angular stop cock, long thread of approved make continental including SS bottle trap of necessary pipe connection up to the outside face of the wall, having Telephonic Black / Colour Granite of 180 mm thick fixed on Black Kadappa Framework, etc. Complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	18645	624
1627	Plumbing	48.36		Providing and fixing Table top white wash basin of size 120x635x405mm rubber plugs and brass chain, with pillar cock, C.P.Angular stop cock long thread, continental including S.S. bottle trap of approved make having necessary pipe connection up to the outside face of the wall.etc complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	23429	624
1628	Plumbing	48.37		Providing and fixing white Opal series European type wall-hung, of size 400mmx370mmx575mm with approved make flush valve including soil pipe, vent pipe upto outside face of wall, 100mm dia C.I. plug bend inlet pipe all fittings, cutting & making good walls, floors etc as directed by Engineer in charge.	As directed by Engineer in charge	Number	23429	624
1629	Plumbing	48.38		Providing and fixing Orissa Pan of size 580x445x260 mm with approved make flush valve including trap, C.I. soil and vent pipe upto outside face of wall including 100mm dia. C.I. plug, bend and necessary pipe connection, etc complete. As directed by Engineer in charge.	As directed by Engineer in charge	Number	7139	624
1630	Plumbing	48.39		Providing and fixing C.P. a 2-Way BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Number	2364	223
1631	Plumbing	48.4		Providing and fixing white wash basin with half pedestal of size 515mmX615mmX460mm including pillar cock auto-closing system CP angular stop cock long thread of approved make continental including S.S. bottle trap of necessary pipe connection upto the outside face of the wall.	As directed by Engineer in charge	Number	10972	1827
1632	Plumbing	48.41		Providing and fixing white european type wall-hung pan, of size 350mm x 355mm x 570 mm concealed flush tank with floor-mounting frame installing kit and drain pipe connection set for wall hung WC, with approved make square control plates including soil pipe, vent pipe upto the outside face of wall, 100mm dia C.I. plug bend inlet pipe all fittings, cutting & making good walls, floors etc. complete.	As directed by Engineer in charge	Number	30447	0

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1633	Plumbing	48.42		Providing and fixing Orissa type white glazed earthenware water closet pan of size 260mm x 440mm x 580mm with approved make Slim wall hung cistern with installation kit including S or P trap with cast iron soil and vent pipe upto outside face of the wall 1:2:4 brick bat lime concrete bedding without flushing tank and its accessories etc.complete.	As directed by Engineer in charge	Number	3358	0
1634	Plumbing	48.43		Providing and fixing white glazed urinal of size 710x460x300mm with sensotronic concealed type flushing valve for urinal with complete kit having fittings, inlet pipe with stop tap, brackets for fixing the cistern, 32mm diameter P.V.C. flush pipe with fitting and flushing arrangement including lead soil pipe, lead trap & soil pipe connection upto the outside face of wall etc complete.	As directed by Engineer in charge	Number	15989	1469
1635	Plumbing	48.44		Providing and fixing of approved make white aquafree Waterless Urinal of with cartridge size of 31.5x33x60cm including other necessary fittings etc. complete.	As directed by Engineer in charge	Number	17998	624
1636	Plumbing	48.45		Providing and fixing wall-hung white wash basin of size 470x575x190mm of approved make half pedestal, pillar cock, C.P.Angular stop cock, long thread continental including S.S. bottle trap of having necessary pipe connections up to the outside face of the wall.etc complete.	As directed by Engineer in charge	Number	8806	624
1637	Rain water harvesting	48.46		RWH - Shallow Percolation Pit providing, constructing 2.0m deep shallow depth percolation pit comprising of 1.0m dia pre-cast RCC rings, 300mm thick side filling around outside of RCC rings (annular space) with 40mm size boulders including filling of percolation pit up to 0.5m depth (from bottom up) with 25-75mm clean washed gravels followed by 0.5m depth of 10-25mm of clean washed stones followed by 0.5m of washed river fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) including netlon mesh between each gravel/fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) media layer including covering with RCC slab, manhole frame & cover, PVC rungs etc. including arrangement for inlet & outlet pipe, excavation & backfilling as shown in the drawing. The rate shall be inclusive of all labour, material, wastage, scaffolding, transportation, taxes, including all leads, lifts at all levels. All material should be of approved make. All works complete as per the drawing, technical specification and direction of the Engineer in charge	As directed by Engineer in charge	Number	51500	14047

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1638	Rain water harvesting	48.47		RWH - Recharge Pit Providing and constructing recharge pit of 2.0m deep and 1.0m dia of pre-cast RCC rings with 6.5" dia x 25m deep borewell at the floor of recharge pit including installation of combination of solid/perforated PVC casing pipe wrapped around with netlon mesh including 300mm thick sidefilling around outside of RCC rings (annular space) with 40mm size boulders including filling of recharge pit up to 0.5m depth with 25-75mm clean washed gravels from bottom up followed by 0.5m depth of 10-25mm of clean washed stones followed by 0.5m of washed river fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) including netlon mesh between each gravel/fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) media layer including covering with RCC slab, manhole frame & cover, PVC rungs, PVC end-caps, fittings etc. including arrangement for inlet & outlet pipe excavation & backfilling as shown in the drawing. The rate shall be inclusive of all labour, material, wastage, scaffolding, transportation, taxes, including all leads, lifts at all levels. All material should be of approved make. All works complete as per the drawing, technical specification and direction of the Engineer in charge.	As directed by Engineer in charge	Number	91300	18098
1639	Rain water harvesting	48.48		Boring/drilling bore well of 300mm dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machinery required for the job, all complete as per direction of Engineer in charge, upto 90m depth below ground level.	As directed by Engineer in charge	Running metre	413	89
1640	Rain water harvesting	48.49		Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well-casing pipe of 150mm dia, conforming to IS:12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per the direction of Engineer in charge.	As directed by Engineer in charge	Running metre	479	17
1641	Rain water harvesting	48.50		Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well screen pipes with ribs of 100mm dia, conforming to IS:12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per the direction of Engineer in charge.	As directed by Engineer in charge	Number	324	6
1642	Rain water harvesting	48.51		Supplying, filling, spreading & leveling stone boulders of size range 5cm to 20cm in recharge pit, in the required thickness, for all leads & lifts, all complete as per the direction of Engineer-in-charge.	As directed by Engineer in charge	Cubic Metre	724	149
1643	Rain water harvesting	48.52		Supplying, filling, spreading & leveling gravels of size range 5mm to 10mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-incharge.	As directed by Engineer in charge	Cubic Metre	1238	149

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1644	Rain water harvesting	48.53		Supplying, filling, spreading & leveling coarse fine aggregate (crushed sand VSI grade finely washed etc.) of size range 1.5mm to 2mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer in charge.	As directed by Engineer in charge	Cubic Metre	1258	169
1645	Rain water harvesting	48.54		Gravel packing in tubewell construction in accordance with IS:4097, including providing gravel: fine/ medium/ coarse, in required grading & sizes as per the actual requirement, all complete as per direction of Engineer in charge.	As directed by Engineer in charge	Cubic Metre	1267	179
1646	Others	48.55		Providing and Fixing Sun Louvre panels roll formed, 0.6mm thick, pre-painted stove enameled aluminium strip of a corrosion resistant alloy, including necessary fitting etc. complete, as directed by Engineer in Charge.	As directed by Engineer in charge	Square Metre	7091	895
1647	Others	48.56		Providing & fixing heat insulation by wrapping the pipes with glass wool/asbestos fibre rope or tape/videoflex 32 mm as directed by Engineer in charge.	As directed by Engineer in charge	Running metre	220	41
1648	Others	48.57		Providing & fixing heat insulation by wrapping the pipes with glass wool/asbestos fibre rope or tape/videoflex 25 mm as directed by Engineer in charge.	As directed by Engineer in charge	Running metre	169	38
1649	Others	48.58		Providing & fixing heat insulation by wrapping the pipes with glass wool/asbestos fibre rope or tape/videoflex 15 mm as directed by Engineer in charge.	As directed by Engineer in charge	Running metre	136	35
1650	Others	48.59		CoolMortar - Providing & fixing 40mm thick CoolMortar for insulation which has proportioned blend of white cement, well-graded fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and selected assortment of fine metal and mineral stabilizers to provide a heat barrier including filling joints, curing and cleaning complete. The rate shall be inclusive of all labour, material, scaffolding, transportation, taxes, including all leads, lifts at all levels and shall be as directed by Engineer in charge.	As directed by Engineer in charge	Square Metre	3222	865

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1651	Others	48.60		Bamboowood 10mm thick Wall Cladding including Threshold & T-mold - Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building materials & Technology Promotion Council (BMTPC). with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50mm in centre and ends of each tile. The bamboowood cladding shall be laid over teak wood frame and hold in place by 50mm thick teak wood placed in centre of two teak wood and backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.	As directed by Engineer in charge	Square Metre	6888	1078
1652	Others	48.61		Bamboowood 10mm thick Wall Cladding including Threshold & T-mold for Accoustic purpose Providing & fixing in position Phenol bonded Bamboowood wall cladding at all height with planks of sizes 10mm thick, 1900mm length (minimum) and 135mm wide approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC) with necessary profiled edges fixed with BR nails to frame work made of second class teak wood of size 50 x 50 mm in centre and ends of each tile. The bamboowood cladding shall be laid over glass wool of 50mm thickness filled in between two teak wood frame and hold in place by 50mm thick teak wood placed centre of two teak wood and covered with mesh (rabbit) fixed to teak woodframe work with wire nails as backlayment and covered with 1.00mm thick expanded poly ethylene foam of density 25Kilogram/cum in two layers first layer on wall surface before fixing wooden frame and second layer on frame under cladding. The Bamboowood planks shall have minimum density of 1000 Kilogram/cum & minimum Hardness 1000 Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.	As directed by Engineer in charge	Square Metre	6442	300

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2020-21 : Coastal								
1653	Coastal	49.01		Supplying and spreading geofabric filter layer of Geotextile of Polypropylene multifilament woven to the line, level and grade with pore size less than 0.075 mm and permeability greater than 9.0 litre/Square Metre/second confirming specification IS:1969 and ASTM standard including conveying to the site, joining and stitching with proper overlap and laying at excavated surface in tidal condition as directed by Engineer- in- Charge etc. complete.	As directed by Engineer in charge	Square Metre	72	10
	Coastal	49.02		Providing and laying filter layer of polythene bags, filled with a/b/c including conveying and placing in proper line, level as per drawing in tidal condition as directed by Engineer - in-Charge.	As directed by Engineer in charge			
1654		a		sand obtained from excavation of foundation		Cubic Metre	330	140
1655		b		50% Sand obtained from excavation + 50% crushed sand		Cubic Metre	736	167
1656		c		crushed sand (upto 5 mm) brought by Contractor		Cubic Metre	1189	242
1657	Coastal	49.03	Rd - 19; Rd - 29; Rd - 27.	Supplying and laying trap stones upto 20 kilogram for Filter / Core layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	664	68
1658	Coastal	49.04	Rd - 19; Rd - 29; Rd - 27.	Supplying and laying laterite stones upto 20 kilogram for Filter / Core layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	515	68

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1659	Coastal	49.05	Rd - 19; Rd - 29; Rd - 27.	Supplying and laying trap stone weighing 20 to 50 kilogram for Core / Sub armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	675	68
1660	Coastal	49.06	Rd - 19; Rd - 29; Rd - 27.	Supplying and laying laterite stone weighing 20 to 50 kilogram for Core / Sub armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	537	68
1661	Coastal	49.07		Laying of trap / laterite stones by rearrangement of stones displaced from existing protection bund weighing upto 50 kilogram for Core / Sub armour layer including collection, sorting and relaying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	132	68
1662	Coastal	49.08	Rd - 19; Rd - 29; Rd - 27.	Supplying and laying trap stone weighing 50 to 100 kilogram for Core / Sub armour / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	728	68

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1663	Coastal	49.09	Rd - 19; Rd - 29; Rd - 27.	Supplying and laying laterite stone weighing 50 to 100 kilogram for Core / Sub armour / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	594	68
1664	Coastal	49.10		Laying of trap stones by rearrangement of stones displaced from existing protection bund weighing 50 to 100 kilogram for Core / Sub armour / Armour layer including collection, sorting and laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	195	68
1665	Coastal	49.11	Rd - 19; Rd - 29; Rd - 27.	Providing and laying trap stones weighing 100 to 200 kilogram for Core / Sub armour / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	923	136
1666	Coastal	49.12		Laying of trap stones by rearrangement of stones displaced from existing protection bund weighing 100 to 200 kilogram Sub armour / Apron / Armour layer including collection, sorting and laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	391	136
1667	Coastal	49.13	Rd - 19; Rd - 29; Rd - 27.	Providing and laying trap stones weighing 200 to 300 kilogram for Apron / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	992	136

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1668	Coastal	49.14		Laying of trap stones by rearrangement of stones displaced from existing protection bund weighing 200 to 300 kilogram for Apron / Armour layer including collection, sorting and laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	442	136
1669	Coastal	49.15	Rd - 19; Rd - 29; Rd - 27.	Providing and laying trap stones weighing 300 to 500 kilogram for Sub armour / Apron / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	1035	136
1670	Coastal	49.16		Laying of trap stones by rearrangement of stones displaced from existing protection bund weighing 300 to 500 kilogram for Sub armour / Apron / Armour layer including collection, sorting and laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	493	136
1671	Coastal	49.17	Rd - 19; Rd - 29; Rd - 27.	Providing and laying trap stones weighing 500 to 1000 kilogram for Apron / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	1126	136
1672	Coastal	49.18		Laying of trap stones by rearrangement of stones displaced from existing protection bund weighing 500 to 1000 kilogram for Apron / Armour layer including collection, sorting and laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	544	136

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1673	Coastal	49.19	Rd - 19; Rd - 29; Rd - 27.	Providing and laying trap stones weighing above 1000 kilogram for Apron / Armour layer including conveying with all the leads, lifts, laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]	Cubic Metre	1168	136
1674	Coastal	49.20		Laying of trap stones by rearrangement of stones displaced from existing protection bund weighing above 1000 kilogram for Apron / Armour layer including collection, sorting and laying in required lines, level, slope as per drawing including necessary equipments and machinery as directed by etc. complete in tidal conditions.	as directed by Engineer in charge	Cubic Metre	595	136
	Coastal	49.21	Rd - 19; Rd - 29; Rd - 27.	Providing & fixing G.I. wire Gabions coated with Zinc+PVC of required size, section including boxes made of mechanically woven hexagonal shaped wire mesh of type, 10x12cm. edges mechanically selvedged made of heavily (Zinc+ PVC) coated G.I. wires as per BS: 443, mesh wire 3.00 mm Ø edge wire 3.9 mm Ø and filled with 20 to 50 kilogram weight trap stones including conveying with all the leads & lifts and placing at required places in required line, level, slope as per drawing, section as directed etc. complete under tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]			
1675		a		(a) Gabions of size – 1.00 x 1.00 x 1.00 M		Cubic Metre	2627	351
1676		b		(b) Gabions of size – 1.50 x 1.00 x 1.00 M		Cubic Metre	2279	325
1677		c		(c) Gabions of size – 2.00 x 1.00 x 1.00 M		Cubic Metre	2271	299
1678		d		(d) Gabions of size – 3.00 x 1.00 x 1.00 M		Cubic Metre	2157	246
1679		e		(e) Gabions of size – 4.00 x 1.00 x 1.00 M		Cubic Metre	2050	184

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Coastal	49.22	Rd - 19; Rd - 29; Rd - 27.	Providing and laying box type flexible gabions of required size and rope of 10 mm Ø polypropylene material four strand mesh of 150 mm x 150 mm size, filled with hand packed stones of 20 to 50 kilogram in weight; so as to give total mass required with all leads and lifts including fusing top of gabions, tying to each other and laying to required line, level, slope as per drawing, section as directed etc. complete under tidal conditions.	Spec.Number-Rd-19, Page-187; Rd-29, Page-193; Rd-27, Page-192. [Except weight of stone specified in wording of specification]			
1680		a		(a) Gabions of size – 1.00 x 1.00 x 1.00 M		Cubic Metre	2293	351
1681		b		(b) Gabions of size – 1.50 x 1.00 x 1.00 M		Cubic Metre	2117	328
1682		c		(c) Gabions of size – 2.00 x 1.00 x 0.50 M		Cubic Metre	1678	299
1683		d		(d) Gabions of size – 3.00 x 1.00 x 1.00 M		Cubic Metre	1873	246
1684	Coastal	49.23	Bd.E.5	Providing and laying precast tetrapods / blocks of plain cement concrete of M-30 grade, weighing 2000 kilogram each of required shape for armour layer including necessary steel formwork/mould including applying form releasing agent including vibration, curing, conveying and placing them in correct profile as per drawing including all labours, materials, equipments, machinery such as crane of adequate capacity and boom length, with all lead and lift etc. complete in tidal conditions.	Spec. NumberBd. E. 5; Page Number 67 / 2012	Number	8797	1628
1685	Coastal	49.24	Bd.E.5	Providing and laying precast tetrapods / blocks of plain cement concrete of M-30 grade, weighing 3000 kilogram each of required shape for armour layer including necessary steel formwork/mould including applying form releasing agent including vibration, curing, conveying and placing them in correct profile as per drawing including all labours, materials, equipments, machinery such as crane of adequate capacity and boom length, with all lead and lift etc. complete in tidal conditions.	Spec. NumberBd. E. 5; Page Number 67 / 2012	Number	11899	2294
1686	Coastal	49.25	25	Relaying of precast concrete tetrapods / blocks, weighing upto 4000 kilogram each of required shape for armour layer including removing from existing protection bund and relaying in correct profile as per drawing including all labours, materials, equipments, machinery such as crane of adequate capacity and boom length, with all lead and lift etc. complete in tidal conditions.	As directed by Engineer -in-Charge	Number	2454	272

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1687	Coastal	49.26	Bd.E.5	Providing and laying in situ M-20 cement concrete of trap / granite / quartzite / gneiss metal with 15% plum of trap stones for foundation and bedding of retaining walls and jetty etc. including necessary formwork, compacting, curing, bailing out water manually in tidal range etc. complete.	Spec. NumberBd. E. 5; Page Number 67 / 2012	Cubic Metre	5781	1598
1688	Coastal	49.27	Bd.E.5	Providing and laying in situ M-25 cement concrete of trap / granite / quartzite / gneiss metal with 15% plum of trap stones for retaining walls and jetty etc. including necessary formwork, compacting, curing, bailing out water manually in tidal range etc. complete.	Spec. NumberBd. E. 5; Page Number 67 / 2012	Cubic Metre	5936	1598
1689	Coastal	49.28	28	Providing and fixing stainless steel bollard of steel pipe 1.00 metre long of 250 mm inner diameter and circular top plate of 350 mm diameter with 5 mm thickness on deck of jetty in cement concrete including necessary fixtures and fastening etc. complete. (Stainless steel of grade S-304)	As directed by Engineer -in-Charge	Number	20644	1400
1690	Coastal	49.29	29	Providing and fixing stainless steel mooring ring in cement concrete on deck of jetty consist of 32 mm thick steel bar, 225 mm inner diameter, steel ring with 75 mm inner diameter steel hook of 32 mm diameter as per approved drawing etc. complete. (Stainless steel of grade S-304)	As directed by Engineer -in-Charge	Number	9811	280
1691	Coastal	49.30	30	Providing and fixing fenders made from used tyres including fixing by stainless steel chain links of 8mm dia. and anchor bolts of 16 mm diameter etc. complete as per drawing and as directed under tidal range.	As directed by Engineer -in-Charge	Number	2334	860
1692	Coastal	49.31	31	Supplying and laying 100% PP Staple fibre Non woven Geobags filled with locally available sand (initial Lead of 50m) having minimum mass of 400 GSM and Tensile strength of 22/24 KN/M in MD/CD and elongation of 60/60 %. The specified Geotextile (Bags) shall have puncture resistance of 4100 N and abrasion resistance of greater than 75% of strength & thickness, to be laid as per drawing in required line, level, slope as per drawing, section in tidal condition as directed by Engineer - in - Charge. (Size of Bag 1.00 x 0.70m with inflated thickness of 10cm at Centre weight of each filled bag shall be in between 130 to 150 kilogram)	As directed by Engineer -in-Charge	Number	278	42
1693	Coastal	49.32	32	Supplying and laying 100% PP Staple fibre Non woven Geo bags filled with locally available sand (initial Lead of 50m) having minimum mass of 400 GSM and Tensile strength of 22/24 KN/M in MD/CD and elongation of 60/60 %. The specified Geotextile (Bags) shall have puncture resistance of 4100 N and abrasion resistance of greater than 75% of strength & thickness, to be laid as per drawing in required line, level, slope as per drawing, section in tidal condition as directed by Engineer - in - Charge. (Size of Bag 2.00 x 1.50m with inflated thickness of 40cm at Centre weight of each filled bag shall be in between 550 to 600 kilogram)	As directed by Engineer -in-Charge	Number	1583	158

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Coastal	49.33	33	Providing laying and placing in position segment of a/b/c diameter UV Resistance Geotextile tubes as per design and drawing of High strength woven Geotextile made from polypropylene multifilament woven in both warf and weft directions, with cover of UV protective pp tape woven Geotextile with pore size less than 0.075 millimetre and permeability greater than 9.00 litre/square metre/second conforming specification IS:1969 and ASTM standards placed parallel to high water line and duly filled with sea sand mechanically by sand dredging machine so as to act as main burnt and toe burm at offshore to hold accumulated sand on beach including all labour, plant, equipment and machinery required including shuttering and scaffolding as directed by Engineer-in-Charge of the work etc. complete.	As directed by Engineer -in-Charge			
1694		a		(a) Geotextile tubes of diameter – 3.00 M		Running metre	10470	492
1695		b		(b) Geotextile tubes of diameter – 1.50 M		Running metre	5918	246

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2018-19 Additional New Items								
1696	Waterproofing Treatment	50.01		Waterproofing Treatment to existing Terrace by using Polymeric cementitious membrane of approved make & approved by Engineer in charge by replacing the existing waterproofing treatment. Break open the existing I.P.S. and brick bat coba of the terrace slab to expose the bare slab. (If there are cracks on the bare slab open the crack in V Groove and fill it with P.M.M. and if there are lots of honeycombs and identified bad patches of concrete the same should be grouted by grouting procedures). Clean the entire surface thoroughly and over this prepared surface, apply three coats of polymeric waterproofing coating having a breathable non toxic acrylic polymer liquid of approved make & approved by Engineer in charge, over this waterproofing treatment, provide and lay brick bat coba of average 112 mm thickness.	As directed by Engineer in charge	Square metre	1981	1018
1697	Waterproofing Treatment	50.02		Waterproofing Treatment to existing Toilet and bathrooms by using Polymeric cementitious membrane of approved make & approved by Engineer in charge and replacing the existing waterproofing treatment. Break open the existing I.P.S. and brick bat coba of the toilet and bathroom areas to expose the bare slab. (If there are cracks on the bare slab open the crack in V Groove and fill it with P.M.M. and if there are lots of honeycombs and identified bad patches of concrete the same should be grouted by grouting procedures). Clean the entire surface thoroughly and over this prepared surface, apply three coats of polymeric waterproofing coating having a breathable non toxic acrylic polymer liquid of approved make & approved by Engineer in charge over this waterproofing treatment, provide and lay brick bat coba of average 112 mm thickness.	As directed by Engineer in charge	Square metre	1981	1018
1698	Waterproofing Treatment	50.03		Clean the deck surface of the bridge of all loose particles, dust, cement laitance etc. preferably done by using machine like device. Inspect for cracks/construction joints. Fill the cracks by Flexiroof PU of approved make & approved by Engineer in charge (This coating is to be protected by providing IPS on top of it). Provide and apply a primer coat of Flexiroof PU Primer of approved make & approved by Engineer in charge on the cleaned RCC deck surface using a soft paint brush. Shake the container well and directly apply the primer by brush. Allow it to set for 30 - 45 mins. Provide and apply Flexiro of PU of approved make & approved by Engineer in charge by brush, roller or airless spray equipment. Apply at a rate of 1 Kilogram/Square Metre for the first coat evenly over the primer surface and allow to set for 12 hours. After ensuring that the first coat is set and cured, apply the second coat in similar manner at a rate of 0.5 Kilogram/Square Metre and allow to set. While the second coat is has reasonably hardened but still wet and tacky on surface, sprinkle sand over the surface to make it rough so as to provide mechanical key for the protective screed/I.P.S. Ensure that the sand does not gets embedded in the second coat and remains on the surface. Allow the two coats of Flexiroof PU of approved make & approved by Engineer in charge to air cure for 4-5 days before proceeding with the protective screed. This should be followed by application of	As directed by Engineer in charge	Square metre	2134	450

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
				The liquid membrane should have a track record of atleast 4 years in India & Gulf region and have atleast an 4 year track record in PWD. Single Component, Liquid Applied, Polyurethane Membrane should have following minimum properties: 1. Water permeability (DIN 1048): Nil as per DIN 1048 @ 7 bar of hydrostatic pressure. 2. Moisture permeability: < 0.4 g/m2/day 3. Accelerated Weathering (IS 101): 2000 hrs No cracking or blister formation. 4. Adhesion to concrete (ASTM D 1000): >21 Kilogram/cm2 (Concrete Fails) 5. Tensile Strength: > 2.0 MPa (ASTM D412) 6. Should not be water soluble or water dilutable 7. Shore A Hardness: 40 ± 5 (ASTM D2240) 8. Elongation at Break: > 900 % (ASTM D412) 9. Solids: > 95 % 10. No micro-bubble formation or blistering should take place during the curing of thick films. It shall be applied as per manufacturers specification.				
1699	Waterproofing Treatment	50.04		Clean the R.C.C. roof slab surface of all loose particles, dust, cement laitance etc. preferably done by using machine like device. Inspect for cracks/construction joints. Fill the cracks by Flexiroof PU of approved make & approved by Engineer in charge (This coating is to be protected by providing I.P.S. on top of it). Provide and apply a primer coat of Flexiroof PU Primer of approved make & approved by Engineer in charge on the cleaned RCC deck surface using a soft paint brush. Shake the container well and directly apply the primer by brush. Allow it to set for 30 - 45 mins. Provide and apply Flexiroof PU of approved make & approved by Engineer in charge by brush, roller or airless spray equipment. Apply at a rate of 1 Kilogram/Square Metre for the first coat evenly over the primer surface and allow to set for 12 hours. After ensuring that the first coat is set and cured, apply the second coat in similar manner at a rate of 0.5 Kilogram/Square Metre and allow to set. While the second coat is has reasonably hardened but still wet and tacky on surface, sprinkle sand over the surface to make it rough so as to provide mechanical key for the protective screed/IPS. Ensure that the sand does not gets embedded in the second coat and remains on the surface. Allow the two coats of Flexiroof PU of approved make & approved by Engineer in charge to air cure for 4-5 days before proceeding with the protective screed. This should be followed by application of	As directed by Engineer in charge	Square Metre	2135	450

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
				The liquid membrane should have a track record of atleast 4 years in India & Gulf region and have atleast an 4 year track record in PWD. Single Component, Liquid Applied, Polyurethane Membrane should have following minimum properties: 1. Water permeability (DIN 1048): Nil as per DIN 1048 @ 7 bar of hydrostatic pressure. 2. Moisture permeability: < 0.4 g/m2/day 3. Accelerated Weathering (IS 101): 2000 hrs No cracking or blister formation. 4. Adhesion to concrete (ASTM D 1000): >21 Kilogram/cm2 (Concrete Fails) 5. Tensile Strength: > 2.0 MPa (ASTM D412) 6. Should not be water soluble or water dilutable 7. Shore A Hardness: 40 ± 5 (ASTM D2240) 8. Elongation at Break: > 900 % (ASTM D412) 9. Solids: > 95 % 10. No micro-bubble formation or blistering should take place during the curing of thick films. It shall be applied as per manufacturers specification.				
1700	Waterproofing Treatment	50.05		Clean the RCC roof slab surface of all loose particles, dust, cement laitance etc. preferably done using machine like device. Inspect for cracks /construction joints. Fill the cracks by Elastorof PU of approved make & approved by Engineer in charge. Provide and apply a primer coat of Sunprime PU primer of sunanda or equivalent or approved by Engineer in charge on the cleaned RCC slab surface using a soft paint brush. Shake the container well and directly apply the primer by brush. Allow to set for 30 - 45 mins depending on the ambient temperature. After the primer has totally cured and dried, apply Elastorof PU of approved make & approved by Engineer in charge by brush, roller or airless spray equipment. Apply at a rate of 1 Kilogram/Square Metre for the first coat evenly over the primer surface and allow to set for 12 hours. After ensuring that the first coat is set and cured, apply the second coat in similar manner at a rate of 0.5 Kilogram/Square Metre and allow to set. While the second coat is has reasonably hardened but still wet and tacky on surface, sprinkle sand over the surface to make it rough so as to provide mechanical key for the protective screed/I.P.S. of 25 MM thick waterproof bedding. Ensure that the sand does not gets embedded in the second coat and remains on the surface. Allow the two coats of Elastorof PU of approved make & approved by Engineer in charge to air cure for 4-5 days before proceeding with the protective screed.	As directed by Engineer in charge	Square Metre	1440	450

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
				Single Component, Liquid Applied, Polyurethane Membrane should have following minimum properties: 1. Specific gravity: 1.30 ± 0.1 2. Elongation %: >600 3. Tack free time: 24-48 hrs 4. Tensile strength N/mm ² : 2.1 5. Shore hardness: 40 ± 5 It shall be applied as per manufacturers specification.				
1701	Protective coating and DPR	50.06		Providing and applying two coats of protective membrane over the cured concrete surface like R.C.C. footings, columns, plinth beams etc. which will be submerged under soil so as to protect the same. Apply two pack coal tar epoxy system of Sunepoxy Coal tar of approved make & approved by Engineer in charge, having solid content ranges from 80-100%, Tack free time 4-6 hrs. Recoat after 16-24 hrs. Mix Part A and Part B of Sunepoxy Coal tar of approved make & approved by Engineer in charge in 1:1 ratio with slow speed stirrer and apply the same on a clean R.C.C. surface by brush. Allow to set for 8-10 hours and apply the second coat. The rate to include for application at all levels to various RCC elements to the satisfaction of the EIC etc. complete.	As directed by Engineer in charge	Square Metre	247	120
1702	Corrosion Inhibiting Admixture	50.07		Providing & Supplying corrosion inhibiting admixture in concrete to protect steel bars for all concrete in every part Polyalk CP 293 of approved make & approved by Engineer in charge migrating, non-nitrite based corrosion inhibiting admixture shall be added at a dose of 3 Kilograms per cum of concrete. The admixture should protect both cathodic and anodic sites and have been accredited by Indian Roads Congress, recommended for use by Ministry of Road Transport & Highways and should have a 4 year track record of use in both the Gulf Region and India. Admixture should have evaluated test reports demonstrating a corrosion rate of zero coulombs after 9 test cycles as per ASTM G 109 when tested from a research institution NBA accredited Grade A and internationally ranked among top 5 research institutions in the world in Annual Survey conducted by Georgia Institute of Technology ranking of research institutions. PH of admixture should be alkaline in nature, specific gravity of 0.99 – 1.1, colour : brownish. The contractor must intimate the engineer in charge prior to addition in concrete for recording. If the admixture is put in the concrete mix at the batching plant, a written record of the amount of admixture used shall be supplied to the engineer. The engineer must ensure that the specified dosage of admixture is added in the concrete mix. (Material Cost Analysis only)	As directed by Engineer in charge	Kilogram	210	---
1703	Waterproofing admixture	50.08		Providing and mixing shrinkage compensating admixture cum plasticizer – Sunplex 330 gms pouch of approved make & approved by Engineer in charge, adding per 50Kilogram bag of cement in sand faced cement plaster to internal/external surfaces in finished in proper line and level. Add Sunplex in dry machine mix before addition of gauging water. (Material Cost Analysis only)	As directed by Engineer in charge	Pouch	42	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1704	Bonding agent	50.09		Providing and applying one pack bonding coat between concrete members like RCC slabs, columns, beams, chajjas, pardis etc and cement mortar plaster using Hack Aid Plast of approved make & approved by Engineer in charge. Clean the concrete surface thoroughly to remove dust, dirt, grime, deshuttering oils and rub down to a clean surface. Apply Hack Aid Plast of approved make & approved by Engineer in charge by spray on the entire concrete surface. Provide a lean cement - sand dash coat over the same. Allow the dash coat to set for around 24 hours. Further plastering as per specifications can continue.	As directed by Engineer in charge	Square metre	54	33
1705	Water proofing	50.10		Clean the surface to remove dirt, loose particles. Examine the surface closely for any cracks. Clean the cracks. Provide and fill a pure acrylic, polymer modified ready to use paste Polyfill AR of approved make & approved by Engineer in charge having a cream coloured viscous emulsion ready to use acrylic polymeric non-shrink crackfiller putty with auto suction properties and requiring no bonding agent, no curing and no requirement for opening the existing cracks finishing with subsequent filling as required. Provide and apply three coats of 100% acrylic waterproof heat insulating breathable decorative external coating Sunext 8 of approved make & approved by Engineer in charge, in the desired shade. Stir well and apply by brush for three coats. Applying three coats at an interval of 4-6 hours between each coat. High Performance 100% Acrylic, Waterproof, Anti-fungal, Anti-carbonation, Heat Insulating External Paint should have following minimum properties: 1. Specific Gravity: 1.3 ± 0.1 at 25°C 2. pH: 7.0 to 10.00 3. Viscosity: 18 to 30 sec. at 25°C by Ford Cup Number B-4 (Dilute 2 parts of product with 1 part of water) 4. CO2 diffusion resistance co- efficient (DIN EN 1062-6 (2002-10): 7.59×10^5 5. CO2 diffusion equivalent air layer thickness (DIN EN 1062-6 (2002-10): 127m @ 190 microns DFT 6. Adhesion (ASTM D 4541): 2.3 N/mm ² (Concrete / Substrate Failure) 7. Solar Reflectance Index (ASTM E 1980 11, EN 673:2011, EN 410:2011): 107 It shall be applied as per manufacturers specification.	As directed by Engineer in charge	Square metre	251	163

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Door and Windows	50.11	BD-T	Providing and fixing factory made door/Window frames of required colour made with wood Polymer composite (WPC) extruded internal ribbed sections conforming to American Society for testing and materials (ASTM) in regard with density, tensile strength, flexural strength, Izod impact, water absorption and screw withdrawal strength with wall thickness of 5mm (+/-1mm) and with frames having mitred joints at each corner, joined together by two nos. of 10 x 8 mm & 40 mm long PVC dovetail keys including hard wood piece support along the full vertical and horizontal length in rebate portion hole for fixing hinges and fixtures and the frames fixed to Walls/columns with 15 mm long dash fasteners/holdfasts (dash fasteners/holdfasts to be paid separately) etc. complete as per the direction of Engineer in charge, with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1706		a		1.1. For Profile size of 75 x 50 mm with 32 x 12 mm rebate		Running metre	435.00	74.00
1707		b		1.2 For Profile size of 100 x 50 mm with 32 x 12 mm rebate		Running metre	535.00	90.00
1708		c		1.3 For Profile size of 125 x 50 mm with 38 x 12 mm rebate		Running metre	635.00	108.00
1709		d		1.4 For Profile size of 120 x 50 mm with 32 x 12 mm double rebate (Window Section)		Running metre	650.00	110.00
1710	Paving , Flooring and dado	50.12	BD-M	Supply & Fixing of Rectified Porcelain Stoneware Tiles for Ventilated Facades of Specified size as per specification/ site drawings having 6 mm and 9 mm thickness with factory made Kerfs (grooves) as per need and size 600/1200 and 800/1600. The Rectified Porcelain Stoneware Tiles shall possess properties having Water absorption < 0.5% Bending Strength > 40 N/mm ² and are resistant to : UV Light, chemicals, smog, thermal shocks & bacteria. The facade will be made from Nexion Rectified Porcelain Stoneware Tiles (Sintered Compact Surfaces) specified as per ISO 13006 : Annex G- EN 14411 : Annex G : Dry Pressed Ceramic Tiles and all the tests carried out by Italian labs accredited according to ISO/ IEC 17025 : 2005. The Terramilano Fixing sub structure will confirm to Norme Tec niche per le Costruzioni NTC/8 (Technical Standard for construction) guidelines for construction in Italy, Eurocode 0 " Information on the method of semi-probabilistic limit states and safety factor " Euro code 1 " Determination and calculation of actions on structure " Euro 9 " Project aluminum structures " UNI 11018 and ETAG 034 The Substructure will consists of Upright extruded aluminum profile TruSt80, alloy 6060 T5 thickness equal to 1.5 to 2 mm and dimension 80 x 110 mm, inter axis 80 cm of Length 3660 mm, 8085 Aluminum box Section of 1 x 3 inch, 1x2 inch and 1x 5 inch of length 3660 mm and thickness 1.5 to 2 mm as per need. Brackets St80 galvanized steel and aluminum of 80 mm x 60 mm, aluminum L bracket size 1.5 x 1.5 inch and 1 x 2.5 inch thickness 3 mm that allow to anchor the vertical stand to	As directed by Engineer-in-charge	Square Metre	8693.50	1478.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1711	Paving , Florryng and dado	50.13	BD-M	Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 20 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	2850.00	485.00
1712	Paving , Florryng and dado	50.14	BD-M	Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	2650.00	450.00
1713	Paving , Florryng and dado	50.15	BD-M	Supply & Fixing of Rock / Stone Finished outdoor vitrified flooring Tiles 16 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete with prior approval of concerned Superitending Engineer. .	As directed by Engineer-in-charge	Square Metre	2550.00	433.00
1714	Paving , Florryng and dado	50.16	BD-M	Supply & Fixing of Full Body Vitrifid Steptiles Ready to install Treads and Risers 16 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	2850.00	485.00
1715	Paving , Florryng and dado	50.17	BD-M	Supply & Fixing of Full Body Vitrifid Steptiles Ready to install Treads and Risers 12 mm thick, required width and required finish in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning etc complete.	As directed by Engineer-in-charge	Square Metre	2450.00	416.00
1716	Paving , Florryng and dado	50.18	BD-M	Supply & Fixing of Rock/ Stone Finished Full Body Vitrifid Steptiles with thick Bullnose for Ready to install Treads and Risers, 16 mm thick and of required width in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	3150.00	535.00
1717	Paving , Florryng and dado	50.19	BD-M	Supply & Fixing of Rock/ Stone Finished Full Body Steptiles Stone Vitrifid Tiles with thick Bullnose for Ready to install Steps and Risers 12 mm thick and required width wide in plain pattern including Cement float, filling joints, with neat cement slurry, Natural sand, curing and cleaning complete. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	2650.00	450.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1718	Oil Painting	50.20	IS 12594-1988	Providing hot dip galvanizing conforming to IS 12594-1988 to reinforcement bars, having mass of zinc coating shall not be less than 610 gm/Square Metre of bar surface area factory control process with Degreasing, Rinsing, Acid Pickling, Again Rinsing after picking, Fluxing, Hot Dip Galvanizing in molten Zinc bath Having Zinc purity of bath minimum 98.5% Quenching & Passivation Process. 32 mm to 40 mm dia. with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Metric Tonne	15513.00	2637.00
1719	Oil Painting	50.21	IS 12594-1988	Providing hot dip galvanizing conforming to IS 12594-1988 to reinforcement bars, having mass of zinc coating shall not be less than 610 gm/Square Metre of bar surface area factory control process with Degreasing, Rinsing, Acid Pickling, Again Rinsing after picking, Fluxing, Hot Dip Galvanizing in molten Zinc bath Having Zinc purity of bath minimum 98.5% Quenching & Passivation Process. 16 to 25 mm dia with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Metric Tonne	16296.00	2770.00
1720	Oil Painting	50.22	IS 12594-1988	Providing hot dip galvanizing conforming to IS 12594-1988 to reinforcement bars, having mass of zinc coating shall not be less than 610 gm/Square Metre of bar surface area factory control process with Degreasing, Rinsing, Acid Pickling, Again Rinsing after picking, Fluxing, Hot Dip Galvanizing in molten Zinc bath Having Zinc purity of bath minimum 98.5% Quenching & Passivation Process. 8 to 12 mm dia with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Metric Tonne	16941.00	2880.00
1721	Block masonry	50.23	BD-I	Providing and constructing non load bearing wall with 200 mm Horizontally perforated THERMO clay hollow blocks with compressive strength not less than 35Kilogram/Sqcm, U value of 0.60 W/m ² K, Water Absorption of 15% masonry to be done using sand cement mortar 1:6 with blocks of size 400mm x 200 mm x 200 mm (12.5 brick per Square Metre. excluding mortar joint thickness) including cost of material, labour charges, scaffolding, curing at all height, complete as per specification & directions of Engineer in charge. Cost shall be inclusive of filling the blocks with cement mortar at exposed junctions and filling with concrete using 12mm down size aggregates at Window and door Jambs for fixing hold fast.anchors etc. It must be green building certified from IGBC and Griha and Should comply IS code 3952 with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Square Metre	2840.00	555.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1722	Block masonry	50.24	IS code 3952	Providing and constructing non load bearing wall with 150 mm Horizontally perforated THERMO clay hollow blocks with compressive strength not less than 35Kilogram/Sqcm, U value of 0.60 W/m2K, Water Absorption of 15% masonry to be done using sand cement mortar 1:6 with blocks of size 400mm x 150 mm x 200 mm (12.5 brick per Square Metre. excluding mortar joint thickness) including cost of material, labour charges, scaffolding, curing at all height, complete as per specification & directions of Engineer in charge. Cost shall be inclusive of filling the blocks with cement mortar at exposed junctions and filling with concrete using 12mm down size aggregates at Window and door Jambs for fixing hold fast.anchors etc. It must be green building certified from IGBC and Griha and Should comply IS code 3952 with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Square Metre	2750.00	467.00
1723	Plastering and pointing	50.25		Dry wall cladding with clay tile; Designing, supplying and fixing of Clay tile of Wienerberger (Red Series or Grey Series) or Equivalent with suitable size and thickness not less than 20 mm as per manufacturer with approved colour and pattern with composition of finest powdered clay and colour mixtures. The clay tile shall be fixed on the suitable framing system by using continuous aluminium profiled section as per manufacturer with suitable size and spacing to withstand the structural design criteria specified in the technical specification by using necessary HDG brackets, SS316 grade anchor bolts etc as per manufacturer specification. Cladding joints should be with open groove system. with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Square Metre	10590.00	400.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1724	Block masonry	50.26		Providing and constructing non load bearing wall with 200 mm Grinded Horizontally perforated clay hollow blocks with compressive strength not less than 35Kilogram/Sqcm, U value of 1.00 W/m2K, Water Absorption of 15% tolerance on Grinded brick height is +/- 1.00 mm, masonry to be done using POROTHERM Dry Flx. System with 20 mm thick S shape application (Application method need to be followed as per Wienerberger methodology) blocks of size 400mm x 200 mm x 200 mm (12.5 brick per Square Metre.) including cost of material, labour charges, scaffolding, curing at all height, complete as per specification & directions of Engineer in charge. Cost shall be inclusive of end bricks to be used at window and door jambs for fixing hold fast. anchors etc.,plastering is to be done as per requirement .and is to be considered seperatly with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Square Metre	1822.00	130.00
1725	Block masonry	50.27		Providing and constructing non load bearing wall with 150 mm Grinded Horizontally perforated clay hollow blocks with compressive strength not less than 35Kilogram/Sqcm, U value of 1.2 W/m2K, Water Absorption of 15% tolerance on Grinded brick height is +/- 1.00 mm, masonry to be done using Dry Flx. System with 20 mm thick S shape application (Application method need to be followed as per Wienerberger methodology) blocks of size 400mm x 150 mm x 200 mm (12.5 brick per Square Metre.) including cost of material, labour charges, scaffolding, curing at all height, complete as per specification & directions of Engineer in charge. Cost shall be inclusive of end bricks to be used at window and door jambs for fixing hold fast. anchors etc.,plastering is to be done as per requirement and is to be considered seperatly	As directed by Engineer-in-charge	Square Metre	1650.00	130.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1726	Block masonry	50.28	BD-I	Providing and constructing non load bearing wall with 100 mm Grinded Horizontally perforated clay hollow blocks with compressive strength not less than 35Kilogram/Sqcm, U value of 1.7 W/m2K, Water Absorption of 15% tolerance on Grinded brick height is +/- 1.00 mm, masonry to be done using Dry Flx. Systeam with 20 mm thick S shape application (Application method need to be followed as per Wienerberger methodology) blocks of size 400mm x 100 mm x 200 mm (12.5 brick per Square Metre.) including cost of material, labour charges, scaffolding, curing at all height, RCC. stiffener band necessary at every 1.0 meter height of the wall, complete as per specification & directions of Engineer in charge. Cost shall be inclusive of end bricks to be used at window and door jambs for fixing hold fast. anchors etc.,plastering is to be done as per requirement ,and is to be considered seperatly with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	1325.00	130.00
1727	Plastering and pointing	50.29	BD-I	Providing and fixing of imported clay tiles pn M.S. frame Work using Maditerranean plus roof tiles of Wienberger tile of colour Red Engobe or equivalent with necessary accessories required to fix tile including clips and screw (Prior permission of S.E. is to be obtained before inclusion)	As directed by Engineer-in-charge	Square Metre	3062.00	555.00
1728	Waret supply and sanitary	50.30	BD-V	Providing and fixing Ductile iron manhole cover of light/medium/heavy duty with frame of any size over inspection chamber etc. complete (Prior permission of S.E. is to be obtained before inclusion of this item in the estimate)	As directed by Engineer-in-charge	Kilogram	75.00	12.00
1729	Waret supply and sanitary	50.31	BD-V	Providing and constructing Ductile Iron circular manhole 45 cm dia. At top 90 cm at bottom up to 1.80 meter to 2.70 meter depth including excavation, laying 1:4:8 cement concrete bedding 15 cm thick burnt brick mansonry with 1:1 cement mortar plaster 25 mm thick inside and outside 20 mm (1:3) ductile iron heavy type cover with ring 125Kilogram weight. High strength. More life and Durability, Good Antiskid Grip, Suitable to heavy theatric loading, Light weight casting after cost benefits for Transportation Refilling etc. as per requirement. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Number	12000.00	2040.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Geosynthetic	50.32	MORTH Section-700	Providing and laying CE Marked Woven Polypropylene Geotextile indigenously manufactured from black UV stabilized polypropylene tape yarn of Techfab India on the prepared subgrade for Reinforcement cum separation cum drainage & filtration application with necessary overlaps as per drawing etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1730				a)TFI-5300 Type-I		Square Metre	160.00	44.00
	Geosynthetic	50.33	MORTH Section-700	Providing and laying CE Marked Woven Multifilament Polyester Geotextile indigenously manufactured using high molecular weight, high tenacity polyester filament yarn with high tensile strength, low elongation and low creep of Techfab India on the prepared subgrade for Reinforcement cum separation cum drainage & filtration application with necessary overlap as per drawing etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1734				a) TFI-3100		Square Metre	160.00	44.00
1735				b) TFI-3200		Square Metre	224.00	44.00
	Geosynthetic	50.34	MORTH Section-700	Providing and laying CE Marked Needle Punched and Mechanically Bonded Non-Woven Geotextile (TechGeo) indigenously manufactured from high quality polypropylene staple fibres (continuous filament will not be accepted) of Techfab India on the prepared subgrade for separation, drainage & filtration application with necessary overlaps as per drawing etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1736				a) TFI TECHGEO PR-15		Square Metre	134.00	44.00
1737				b) TFI TECHGEO PR-20		Square Metre	151.00	44.00
1738				c) TFI TECHGEO PR-30		Square Metre	167.00	44.00
1739				d) TFI TECHGEO PR-40		Square Metre	207.00	44.00
1740				e) TFI TECHGEO PR-60		Square Metre	279.00	88.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Geosynthetic	50.35	MORTH Section-700	Providing and Laying CE marked Knitted and PVC coated Polyester Biaxial Geogrid (Techgrid) for Basal Reinforcement indigenously manufactured from selected high tenacity polyester yarn with high molecular weight of Techfab India (> 25000 g/mol), and low carboxyl end group (<30mmol/Kilogram) (extruded PP geogrids & Polyester strips & Geostrips, Steel Strips not allowed & not accepted). Requirement of geogrid strength in both direction and granular fill. (Coating of Geogrid/ reinforcing geosynthetic material with LDPE, Latex, Bitumen and any other coating will not be allowed and will not be accepted). For reinforcement application to subgrade, unbound sub base / base courses & soil stabilization, etc. complete (Specification: MORTH Section-700). with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1741		a		a) TFI TechGrid GeoGrid TGB-40		Square Metre	199.00	44.00
1742		b		b) TFI TechGrid GeoGrid TGB-60		Square Metre	240.00	44.00
	Geosynthetic	50.36	MORTH Section-700	Providing and laying CE Marked PP Extruded Biaxial Geogrid for basal reinforcement, indigenously manufactured from virgin high density polypropylene of Techfab India having aperture size of (38 x 38)mm and ultimate tensile strength of 20 kN/m on both direction with minimum junction strength of 95% & minimum radial stiffness of 350 kN/m (@0.5% strain for reinforcement application to subgrade, unbound sub base / base courses & soil stabilization, etc. complete (Specification: MORTH Section-700).with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1743		a		a) TFI TechGrid GeoGrid PP2020		Square Metre	230.00	44.00
1744		b		b) TFI TechGrid GeoGrid PP3030		Square Metre	296.00	44.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Geosynthetic	50.37	MORTH Section-700	Providing and laying CE Marked knitted and PVC coated Polyester Uniaxial Geogrid (Techgrid) indigenously manufactured from selected high tenacity polyester yarn with high molecular weight of Techfab India (> 25000 g/mol), and low carboxyl end group (<30 mmol /Kilogram) (extruded PP geogrid & Polyester strip & Geostrip, steel strips not allowed & not accepted) with granular fill as per design prepared by technical provider of reinforced earth wall and slope. The reinforced earth wall and slope should have 100% coverage of 5m width knitted and PVC coated Polyester geogrid. (Coating of Geogrid/Reinforcing geosynthetic material with LDPE, Latex, Bitumen and any other coating will not be allowed and will not be accepted) for reinforced soil wall and reinforced slope application, etc. complete (Specification: MORTH Section-3100).with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1745		a		a) TFI TechGrid GeoGrid TGU-40		Square Metre	181.00	44.00
1746		b		b) TFI TechGrid GeoGrid TGU-60		Square Metre	202.00	44.00
	Geosynthetic	50.38	MORTH Section-700	Providing and laying Geocell-Techcell CE Marked a three dimensional honeycomb like cellular confinement system having weld spacing 356mm and cell depth 150mm of Techfab India, indigenously manufactured by blend of various polyethylene and additives, polyethylene strips ultrasonically welded consists of a multiple rhomboidal indentations over the entire strip on the prepared subgrade for subgrade stabilization by reinforcement and drainage application for roads, ground improvement work and erosion control of slopes etc. complete. (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1747		a		a) TFI TechCell GeoCell-356x150		Square Metre	560.00	44.00
1748		b		b) TFI TechCell GeoCell-660x75		Square Metre	326.00	44.00
	Geosynthetic	50.39	MORTH Section-700	Providing and laying CE Marked Reinforced Non-Woven Composite indigenously manufactured needle punched polypropylene (continuous filament will not be accepted) of Techfab India, Reinforced with high tenacity Polyester Yarn on the prepared sub grade for Reinforcement cum separation cum drainage & filtration application with necessary overlaps as per drawing etc. complete. (Specification: IRC:SP:59-MORTH Section-700) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1749		a		a) TFI TGC-60		Square Metre	207.00	44.00
1750		b		b) TFI TGC-90		Square Metre	252.00	44.00
	Geosynthetic	50.40	MORTH Section-700	Providing and inserting CE Marked Prefabricated Vertical Drain / Band Drain (TechDrain) of Techfab India indigenously manufactured with Polypropylene Core and wrapped with Non-Woven Geotextile in the very soft clay to a design depth for quick consolidation etc. complete. (Specification: MORTH Section-700).with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1751		a		a) TFI TechDrain TD-3520 U 100mm x 4mm		Running metre	73.00	4.00
1752		b		b) TFI TechDrain TD-5020 U 100mm x 5mm		Running metre	87.00	4.00
	Geosynthetic	50.41	MORTH Section-700	Providing & fixing CE Marked Metal Gabions indigenously manufactured as per required section including boxes made of mechanically woven hexagonal shaped wire mesh of type, (8 x 10)cm, edges mechanically selvedged made of heavily (Zinc + PVC) coated G.I. wires as per BS:443, mesh wire 2.70/3.70 mm Ø (ID/OD), edge wire 3.40/4.40 mm Ø (ID/OD) of Techfab India type and filled with 20 to 50Kilogramweight trap stones including conveying with all leads and lifts and placing at required places in required line, level, slope, section as directed, etc. and tied by 5% lacing wire 2.20/3.20 mm Ø (ID/OD) as directed by Engineer-in-charge. For retaining walls, toe walls, etc. for slope protection & erosion control application of river bank & sea-shore etc. complete (Specification: MORTH section-2500. (Excluding Rubble) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1753		a		a) For 1m height		Cubic Metre	1953.00	88.00
1754		b		b) For 0.5m height		Cubic Metre	2280.00	44.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Geosynthetic	50.42	MORTH Section-700	Providing and laying CE Marked Glassfibre GeoComposite (TechGlass AIC) indigenously manufactured from high performance glass fibre roving to form a reticular structural material with a unique combination of fused fibre glass and polypropylene non-woven needle punched geotextile to asphalt overlay flexible pavements and asphalt overlay distressed rigid pavements of Techfab India for Reinforcement, seizure reflective cracks, reduced surface rutting & water infiltration. (Specification: MoRTH section-700).with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1755		a		a) TFI Techglass AIC-50		Square Metre	240.00	44.00
1756		b		b) TFI Techglass AIC-100		Square Metre	268.00	44.00
	Geosynthetic	50.43	MORTH Section-700	Providing and laying a Paving Fabric CE Marked Needle Punched and Mechanically Bonded Non-Woven Geotextile of Techfab India, indigenously manufactured from high quality polypropylene staple fibres (continuous filament will not be accepted) with heat treatment on one side to form a strong, flexible and dimensionally stable fabric structure, with optimum bitumen retention capacity to asphalt overlay over flexible pavement and distresses rigid pcc pavement for moisture barrier, avoid reflective cracking and stress relieving membrane with necessary overlaps as per drawing, etc. complete. (Specification: MORTH section-700). with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1758				a) TFI TechPave-C040		Square Metre	116.00	44.00
	Geosynthetic	50.44	MORTH Section-700	Providing and laying Fin Drains (Drainage Composite) TFI TDC-55130W CE Marked indigenously manufactured by thermo bonding a polypropylene drainage core- Geonet comprises of two sets of parallel overlaid ribs integrally connected to have a rhomboidal shape and Needle Punched & Thermally Bonded Nonwoven Geotextile on the prepared sub base of paved/unpaved roads & behind the RE wall by replacing granular filter media for separation, drainage & filtration application with necessary overlaps as per drawing etc. complete . (Specification: MORTH Section-700) with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1760				a) TFI TDC-55130W		Square Metre	431.00	44.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Geosynthetic	50.45	MORTH Section-700	Construction of Reinforced Earth Wall in M-35 Block Facia by Providing and Laying CE marked Knitted and PVC coated Polyester Uniaxial Geogrid (Techgrid) of Techfab India indegeniously manufactured from selected high tenacity polyester yarn with high molecular weight (> 25000 g/mol), and low carboxyl end group (<30mmol/Kilogram) for Reinforced soil wall (extruded PP geogrids & Polyester strips & Geostrips, Steel Strips not allowed & not accepted) with granular fill of PHI-32 degree (design is to be carried out in accordance with BS-8006 / FHWA) with concrete block by M-35 as facia, casting & erection of blocks with Techgrid, providing & laying levelling pad by M-15, providing and laying coping beam by M-35, providing and laying 300mm thick filtermedia etc. completed as per necessary drawing and instruction of Engineer-in-charge. Excluding providing, laying and compacting selected backfill and retained fill behind the wall, excavation and ground improvement, if any. The reinforced earth wall and slope should have 100% coverage of 5m width Knitted and PVC coated Polyester Geogrid. (Coating of Geogrid/ Reinforcing geosynthetic material with LDPE, Latex, Bitumen and any other coating will not be allowed and will not be accepted). (Specification: MORTH Section-3100) with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge			
1761		a		a) RE Wall Height 1 to 4 meter		Square Metre	5486.00	44.00
1762		b		b) RE Wall Height 4 to 6 meter		Square Metre	5832.00	88.00
1763		c		c) RE Wall Height 6 to 8 meter		Square Metre	6085.00	132.00
1764		d		d) RE Wall Height 8 to 10 meter		Square Metre	6313.00	177.00
1765		e		e) RE Wall Height 10 to 12 meter		Square Metre	6831.00	221.00
1766		f		f) RE Wall Height 12 to 14 meter		Square Metre	7285.00	265.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Road safty work	50.46	IS: 10146-1982, IS:10141-1982	Providing Heavy Duty Fibre Glass Reinforced Plastic Temporary Barricade of 1.75 m hight, with base width of 430 mm as a provision to accept water ballasting of 101 Itrs-110 Ltrs approx. and arrangement for traffic diversion such as traffic signals during construction at site, for day and night as per requirement. The raw material shall be UV stabilized Linear Low Density Polyethylene and should meet the requirements stipulated in standard IS: 10146-1982, IS:10141-1982 and should also comply to FDA:CFR Title 21.177.1520. Olefin Polymers , with specific FRP Grade 300-104 reinforced during moulding process to the permissible extent for improved impact strength. Qualification Criteria: For qualifying the sample , few tests shall be performed at Government Lab OR NABL Accredited Lab on Site Safety Fence sample, failure or deviations in test results of sample shall be disqualified.The tests and qualifying results are as under, (a) tensile strength at yield by ASTM D 638 =20.93 mPA, (b) Elongation at break ASTM D 638 = 121.66 mPA (c) Flexural Modulus ASTM D 790 = 633.76 mPA (d) Izod Impact Strenth (Notched) ASTM D 256 = 4.41Kilogram/ Square Metre (e) Izod Impact Strenth (Un-Notched) ASTM D 256 = 67.04Kilogram/ Square Metre (f) Drop Impact strength 25KilogramLoad from 1 m, 2 m & 5m height the weight of empty single Rotomoulded Plastic Barricade without water ballasting shall be 34 Kilograms approx. & total weight after water allasting shall be 135 Kilograms -140 Kilograms +/- 5 Kilograms (tolarence)The main Barricade body of hight 1750 mm approx is connected with the	As directed by Engineer-in-charge			
				to fix two brackets at both end in corner for anchoring purpose .each rear bracket is constructed through rod of Dia.60 mm with curvature welded with MS strip of 3 mm thick ,50 mm width and 90 mm length at its top and base ,effective bracket shall be 410 mm approx. the anchoring hole in each bracket shall be 18 mm dia. for routine the MS bolts of 16 mm thickness and 150 mm length with sharp pointed edge at one end .the upper part of each bracket shall have a slot size of 30 mm x 10 mm for connecting it with barracade model through bolts.similarly front bracket for site safety fence is 3 mm thick ,50 mm width, feective height after single bend is 230 mm and anchoring in each bracket shall be dia 18 mm unique safety feature for firm gripping to prevent from displacement and falling when inter connected even without water filling . There shall be 7 no's premoulded inserts on site Safety Fence for following application: 2no's for safety latches interconnectivity, 2 no's for fixing rear brackets for anchoring, one Number at front side for fixing the front bracket for higher stability, and 2 nos on Extension top for holding light brackets / Rod for cloth holding. The plastic barricades has a strong vertical rib of 1740 mm length at the rear centre & 72 No's of kiss offs spread on entire rear surface , the water container (bottom) will also be equipped with 2 additional ribs on top to withstand nominal load if applied over its surface. The Fibre glass Reinforced Plastic Site Safety Fence shall have one drain bung insert moulded with				
1767		a		a) For 725 mm height (LType Jersey Barrier) ,Empty Weight:6.67 Kilogram/ Rgm,Weight Full : 35.89Kilogram/ Rgm approx. (After Water / Sand Filling)		Running metre	1846.00	314.00
1768		b		b) For 750 mm height (With Interlocking provison - For Traffic Delineation Applications) , Empty Weight:9.04 Kilogram/ Rgm,Weight Full : 57.14Kilogram/ Rgm approx. (After Water / Sand Filling)		Running metre	2872.00	488.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1769		c		c) For 750 mm height (Jersey Barrier Model with unique Interlocking Provision) , Empty Weight:9.0 Kilogram/ Rgm,Weight Full : 55.00Kilogram/ Rgm approx. (After Water / Sand Filling)		Running metre	5026.00	854.00
1770		d		d) Site Safety Fence (1.75 Mtrs(H)) (Efficient Substitution to sheet Metal Barricade) , Empty Weight 16.57: Kilogram/ Rgm,Weight Full : 74.29 Kilogram/ Rgm approx. (After Water / Sand Filling)		Running metre	8103.00	1377.00
1771		e		e) Site Safety Fence (2.00 Mtrs(H)) (Efficient Substitution to sheet Metal Barricade) , Empty Weight : 17.00 Kilogram/ Rgm,Weight Full : 70.00 Kilogram/ Rgm approx. (After Water / Sand Filling)		Running metre	8718.00	1482.00
1772	Road work	50.47	RD	organosilance Nanotechnology for Bituminous organosilance nanotechnology such as Zycotherm added in the bitumen binder @ 0.1% dosage to the weight of the bitumen at HMA plant to schive chemical bonding,complete coating and consistant compaction in various bituminous mixes such as BM/DBM/Carpet/sealcoat/MSS/SDBC etc.as per the direction of Engineer-in-charge with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Kilogram	1400.00	238.00
1773	Road work	50.48	RD	Water proofing of subgrade:waterproofing on top compacted (as per relevant MORT&H specification)sub grade and shoulder soil base with organosilance Nanotechonology & nano acrylic co-polymer with water (<1000 ppm TDS)in the ratio of 1KilogramOrganosilance Nanotechonology :1Kilogramnano acrylic co-polymer :200 liter water spray @3 liter/Square Metre in two spray application (1.5 liter +1.5 liter) as per direction of the Engineer-in-charge. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	14.78	2.00
1774	Road work	50.49	RD	providing and applying primer coat with bitumen emulsion on prepared surface of Aggregate layer including clearing of road surface and spraying primer mixed with Nano- Technology silance in the ratio 1:100:100 (1Kilogramsilance :100KilogramSS1 Emulsion:100 liter water);the rate of 1 Liter/Square Metre using mechanical means as per the direction of Engineer-in-charge. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	18.09	3.00
1775	Road work	50.50	RD	Tack coat (with Silance nanotechnology):preparing and applying of water soluable organo silance nanotechnology (for bitumen emulsion application ,IRC approved) with cationic bitumen emulsion CRS1 amd water (< 1000 ppm TDS) in the ratio of 1:4Kilogram organo silance : 100Kilogram cationic bitumen emulsion CRSS1: 200 liter water. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Square Metre	8.37	1.50

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1776	Road work	50.51	RD	Construction of stabilised soil base with organo silance by providing locally available moorum/soil(70%) mixed with 30% GSB II with 2% cement by MDD of mix, 0.6 Kilogram/Cum nanotechnology silane & 0.6 Kilogram/ cum of Acrilic Nano - Co polymer, Spreading in uniform layers with grader on prepared surface by mixing in place method withrotavator at OMC and compacting with smooth wheel roller to achieve the desired density, complete as per Table 2.3 of IRC SP - 77-2008 as per direcion of Engineer - in - charge. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Cubic Metre	1613.00	275.00
1777	Road work	50.52	RD	Construction of stabilised soil base with organo silance by providing locally available moorum/soil(70%) mixed with 30% GSB II with 3% cement by MDD of mix, 0.6 Kilogram/Cum nanotechnology silane & 0.6 Kilogram/ cum of Acrilic Nano - Co polymer, Spreading in uniform layers with grader on prepared surface by mixing in place method withrotavator at OMC and compacting with smooth wheel roller to achieve the desired density, complete as per Table 2.3 of IRC SP - 77-2008 as per direcion of Engineer - in - charge.with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Cubic Metre	1700.81	289.00
1778	Road work	50.53	RD	Construction of stabilised soil base with organo silance by providing locally available moorum/soil(70%) mixed with 30% GSB II with 4% cement by MDD of mix, 0.6 Kilogram/Cum nanotechnology silane & 0.6 Kilogram/ cum of Acrilic Nano - Co polymer, Spreading in uniform layers with grader on prepared surface by mixing in place method withrotavator at OMC and compacting with smooth wheel roller to achieve the desired density, complete as per Table 2.3 of IRC SP - 77-2008 as per direcion of Engineer - in - charge.	As directed by Engineer-in-charge	Cubic Metre	1788.62	304.00
1779	Road work	50.54	RD	Supplying trap/granite/quartzite/gneiss stone metal of required size by bringing the boulders / Rubble at the road side breaking them to required gradation including conveying the boulders /Rubble and stacking the broken metal etc. complete . (Prior approval of sample stack of broken metal by the Ex. Engineer is necessary the date of approval will form part of the measurements) a)80 mm Metal, By breaking rubble obtained by blasting.(Hand broken). with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge	Cubic Metre	730.00	325.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1780	Road work	50.55	RD	Supplying trap/granite/quartzite/gneiss stone metal of required size by bringing the boulders / Rubble at the road side breaking them to required gradation including conveying the boulders /Rubble and stacking the broken metal etc. complete . (Prior approval of sample stack of broken metal by the Ex. Engineer is necessary the date of approval will form part of the measurements) a)40 mm Metal, By breaking rubble obtained by blasting.(Hand broken).	As directed by Engineer-in-charge	Cubic Metre	780.00	350.00
1781	Road work	50.56	RD	Supplying trap/granite/quartzite/gneiss stone metal of required size by bringing the boulders / Rubble at the road side breaking them to required gradation including conveying the boulders /Rubble and stacking the broken metal etc. complete . (Prior approval of sample stack of broken metal by the Ex. Engineer is necessary the date of approval will form part of the measurements) a)80 mm Metal, By breaking Boulders (Hand broken).	As directed by Engineer-in-charge	Cubic Metre	700.00	335.00
1782	Road work	50.57	RD	Supplying trap/granite/quartzite/gneiss stone metal of required size by bringing the boulders / Rubble at the road side breaking them to required gradation including conveying the boulders /Rubble and stacking the broken metal etc. complete . (Prior approval of sample stack of broken metal by the Ex. Engineer is necessary the date of approval will form part of the measurements) a)40 mm Metal, By breaking Boulders (Hand broken).	As directed by Engineer-in-charge	Cubic Metre	750.00	360.00
1783	Road work	50.58	RD	Spreading 80/40 mm metal for road work including sectionong etc complete as directed by Engineer in charge .	As directed by Engineer-in-charge	Cubic Metre	85.00	75.00
1784	Road work	50.59	RD	Compacting the sub grade/gravel/oversize metal (200 mm loose) layers for all width with Power roller having weight 8 to 10 MT. including necessary, labour, materials and artificial watering complete.	As directed by Engineer-in-charge	Square Metre	27.00	4.00
1785	Road work	50.60	RD	Compacting the sub grade/gravel/oversize metal (200 mm loose) layers for all width with Vibratory roller having weight 8 to 10 MT. including necessary, labour, materials and artificial watering complete.	As directed by Engineer-in-charge	Square Metre	37.00	4.00
1786	Road work	50.61	RD	Compacting the sub grade / gravel / size metal (100 mm loose) layers for all widths with Power roller having weight 8 to 10 MT. including necessary, labour, materials and artificial watering complete.	As directed by Engineer-in-charge	Square Metre	25.00	4.00
1787	Road work	50.62	RD	Compacting the sub grade / gravel / size metal (100 mm loose) layers for all widths with vibratory roller having weight 8 to 10 MT. including necessary, labour, materials and artificial watering complete.	As directed by Engineer-in-charge	Square Metre	34.00	4.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1788	Miscellaneous	50.79	BD-W	Providing and applying two coats Apex Ultima Puranature Anti-Pollution Or equivalent approved brand, paint should decomposes organic substances and inorganic gases(NOx, VOC's, CO, SOx, formaldehydes, etc.) in presence of natural or artificial light. It contains Graphene and nanoparticles of titanium oxide. and Absorbs CO2 (4.8 Kilogram/15 l). plaster crack should be filled by Acrylic base Crack seal/Textured Crack filler, Paint has to applied on one coat of Apex Ultima Puranature Anti-Pollution Primer or Equivalent. Warranty Should be given by the Manufaturer The work should be done by the Manufacturer Recommended applicator and he should be able to furnish stage wise onsite technical reports from the concerned company technologist.	As directed by Engineer-in-charge	Square Metre	371.89	0.00
1789	Miscellaneous	50.80	BD-W	Supply of ready mix patch repairing compound as per section 3000.2.2(filling pothole and patches repair with specific approval of the engineer),MORT&H specifications for roads and bridge works,5th Revision, for instant repair of surface defects of road under all weather conditions.The premix should consists of a binder with hydrophilic properties and accelerated adherence to all types of aggregares and can be applied on all patches and potholes including water logged patches and poyholes and in rainy conditions. The material should be suitable for both Bituminous and concrete roads with quick setting properties and allow traffic to be released within 10 mins.of patch or pothole repair.the material should for use on roads with both passanger and heavy commercial vechiles.The mix should be suitable for repairing of surfacing course and should be comparising of fine aggregates 0-10 mm,(5.5-7.5 %).additives as ewquired.the mix should packed in bags which can be easily handled manually and be storable under normal storage conditions for at least 8 month.	As directed by Engineer-in-charge	Kilogram	25.00	0.00
	Door and Windows	50.81	BD-T	Fire Door 45mm 1HR FRL (60/60) 3 Criteria - INTEGRITY / INSULATION/ STABILITY WOODEN DOOR - Fire Door Tested in accordance to IS: 3614 Part 2.	As directed by Engineer-in-charge			

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
				Providing 60 min Fire rated doors system duly tested for 3 criteria - Integrity, Insulation and Stability Criteria as per the IS: 3614 Part 2 and BS: 476 part 22 at National Test House, Govt of India laborator and/or with Central Building Research Institute, Govt of India undertaking with standard heating conditions as specified in IS:3614 Part II 1992 and BS: 476 part 20 & 22 1987 to achieve the required integrity, insulation and stability (i.e. to restrict the heat radiation, temperature rise on the non fire side to the maximum of 140° C above the ambient temperature on the exposed surface of the shutter. The fire doors are tested with NCBN technology ("Non Combustible by Nature"). with prior approval of concerned Superintending Engineer.				
1790				a) Door Frame: Supplying frames for Fire resistant door shutters 1st class Malaysian Hardwood Frame densified (810 Kilogram/cum) and pressure treated with fire retardant chemicals in vacuum impregnation vessel under 160 psi pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 of section 120 X 60 mm spray quoted with 2 coats of intumescent paint of minimum 200 micron, with single row of Brush- Type ASTROFLAME intumescent strip of size 10mm x 4mm affixed in the slit of the Frame for fire and smoke sealing, etc. complete.		Running metre	1446.90	423.00
1791				b)Shutter : Providing of 65mm thick asbestos free composite - 3 criteria - fire, heat and smoke check Accoustic Door Shutter with flame guard of 120 minutes IS3614 part -II comprising of 2x9mm Calcium Silicate boards, Chemical treated internal timber with Fire retardant chemicals in pressure impregnation vessels under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 frame work of 100x32 mm with 32mm thick infill of ceramic fiber (density 128Kilograms/CMT), vermaculite mix faced with 6mm Fire retardant High Density ply, internally lipped with hardwood beading, and pasted in Hydraulic Press under 50 tonnes pressure, spray quoted with 2 coats of In tumescent paint of minimum 200 micron, and with 1 row of Brush- Type Astroflame® intumescent strip (imported) of size 10mmx4mm concealed for fire and smoke sealing in the grooves in the shutter on all edges except bottom, without any external lipping.		Square Metre	8346.30	2143.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1792				c) Vision Panel: 1 HR rated E Class clear high stress fire rated glass is pre fabricated strategically inside the shutter structure with 10 mm inside the shutter on all sides with U- glazing. An additional insulated powdercoated 'Z' channel of 16 swg MS sheet to be fixed for reinforcement of the joints. With clear fire resistant glass panes 11mm thick having minimum 120 minutes fire Description		Square Metre	33326.50	---
	Door and Windows	50.82	BD-T	Providing of Accoustic Door to effectively control noise inconference rooms, broadcasting studios, theatres and music practice rooms. with prior approval of concerned Superitending Engineer.	As directed by Engineer-in-charge			
1793				a)Door Frame: Providing Frames for Accoustic door shutters with double rabbit of 68mm 1st class Malaysian Hardwood Frame densified and pressure treated with chemicals in vacuum impregnation vessel under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 of section 120 X 70 mm spray quoted with 2 coats of In tumescent paint of minimum 200 micron, with 1 row of Hafele Accoustic seals concealed in the groove of the Frame for noise control, etc. complete as per direction of Engineer in Charge		Running metre	1817.10	423.00
1794				b)Shutter: Providing of 65mm thick Accoustic Door Shutters with wooden structure comprising of Chemical treated internal timber with anti termite chemicals in pressure impregnation vessels under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 frame work of 100x 48 mm with 48 mm thick infill of ceramic vermiculite mix of density 54Kilograms/CMT, 3mm sheet rubber interlayer sheet on one side for acoustic property, faced with 6mm High Density Waterproof Ply confirming to IS Code 2201, internally lipped with hardwood beading, and pasted in Hydraulic Press under 50 tonnes pressure, spray quoted with 2 coats of PU paint of minimum 200 micron of color of engineer choice (any Veneer or Lamination will cost extra), without any external lipping along with double rebatting in shutters & accoustic seal		Square Metre	13112.70	2143.00
	Door and Windows	50.83	BD-T	2 Hour Insulated, Flame, Smoke Radiation check Lead Lined Fire Door 57mm 2HR FRL (120/120) 3 Criteria - INTEGRITY / INSULATION/ STABILITY WOODEN DOOR - Fire Door Tested in accordance to IS: 3614 Part 2. with prior approval of concerned Superitending Engineer	As directed by Engineer-in-charge			

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
				Providing of 120 min Fire rated lead lined doors system duly tested for 3 criteria - Integrity, Insulation and Stability Criteria as per the IS: 3614 Part 2 and BS: 476 part 22 with standard heating conditions as specified in IS:3614 Part II 1992 and BS: 476 part 20 & 22 1987 to achieve the required integrity, insulation and stability (i.e. to restrict the heat radiation, temperature rise on the non fire side to the maximum of 140° C above the ambient temperature on the exposed surface of the shutter. The fire doors are tested with NCBN technology ("Non Combustible by Nature"). Lead lined to check radiation. Code No; 2 Hour Insulated, Flame, Smoke Radiation check Lead Lined Fire Door 57mm 2HR FRL (120/120) 3 Criteria - INTEGRITY / INSULATION/ STABILITY WOODEN DOOR - Fire Door Tested in accordance to IS: 3614 Part 2.				
1795				a) <u>Door Frame</u> : Providing Frames for Lead Lined Fire resistant door shutters 1st class Malaysian Hardwood Frame densified and pressure treated with fire retardant chemicals in vacuum impregnation vessel under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 of section 140 X 70 mm with 45mm thick two layered 3mm Lead Line Sheets with 10mm overlap from either side & spray quoted with 2 coats of Intumescent paint of minimum 200 micron, with 1 row of Brush- Type Astroflame® intumescent strip (imported) of size 10mmx4mm concealed in the groove of the Frame for fire and hot and cold smoke sealing, etc. complete as per direction of Engineer in Charge		Running metre	2893.40	423.00
1796				b) Shutter: Providing of 57mm thick asbestos free composite, 'TUFWUD' brand - 3 criteria - fire, heat and smoke check Lead Lined Door Shutter with flame guard of 120 minutes IS3614 part -II comprising of 2x9mm Calcium Silicate boards, Chemical treated internal timber with Fire retardant chemicals in pressure impregnation vessels under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 frame work of 100x30 mm with 30mm thick infill of ceramic fibre (density 128 Kilograms/CMT) vermiculite mix, 3mm thick Lead Sheet on one side faced & 3mm Fire retardant High Density Fibreboard, internally lipped with hardwood beading, and pasted in Hydraulic Press under 50 tonnes pressure, spray quoted with 2 coats of Intumescent paint of minimum 300 micron, and with 1 row of Brush-Type Astroflame® intumescent strip (imported) of size 10mmx4mm concealed for fire and smoke sealing in the grooves in the shutter on all edges except bottom, without any external lipping.		Square Metre	20002.50	2143.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Door and Windows	50.84	BD-T	Providing of Lead Lined Door system with 120x60 mm Hardwood Frames, interlayered with 3mm lead and 44mm Solid core flush door shutters conforming to the I.S. specification 2202-1991 (specification for wooden flush door shutter – solid core type), interlayered with 3mm lead with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			
1797				a) <u>Door Frame</u> : Providing Frames for Lead Lined door shutters 1st class Malaysian Hardwood Frame densified and pressure treated with fire retardant chemicals in vacuum impregnation vessel under 160 PSI pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141 of section 120 X 70 mm with 45mm thick two layered 3mm Lead Line Sheets being overlapped from either side, spray quoted with 2 coats of Enamel paint after one coat of white wood primer of minimum 200 micron etc. complete as per direction of Engineer in Charge. with prior approval of concerned Superintending Engineer.		Running metre	2431.40	423.00
1798				b) <u>Shutter</u> : Supplying of ' 44mm Solid core flush door shutters conforming to the I.S. specification 2202-1991 (specification for wooden flush door shutter – solid core type). 32mm Wooden structure of 1st class Hardwood or Pinewood of at least 50mm width, top and bottom rails of 75mm width, with filler material without any gap of 1st Class Hardwood, or pine wood, all chemically treated for termite and borer resistance as per IS 401:2001 under minimum 150 PSI pressure, and seasoned as per IS 1141: 1993 upto desired moisture level as per IS 287, with one side 3mm HDF & other side 3mm lead & 6mm BWP ply; all hot-pressed with Phenol Formaldehyde resin, internally lipped with hardwood beading, and pasted in Hydraulic Press under 50 tonnes pressure, spray quoted with 2 coats of enamel paint of minimum 300 micron. with prior approval of concerned Superintending Engineer.		Square Metre	16521.80	2143.00
1799	water supply and sanitary	50.85	BD-V	Providing and fixing Ductile iron Man Hole Covers/ Strom Water Grating and Grating with frame of Various sizes, weight and types and load bearing capacity as per EN-124, equivalent NECO with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge	Kilogram	150.00	15.00
	water supply and sanitary	50.86	BD-V	Supplying installation testing and commissioning of Hubless centrifugally cast iron pipes as per ISI 15905 equivalent to NECO inclusive of all necessary special fitting like bends, tees, and caps, 'Y' bends for cleaning offsets, junctions, cowls, etc. lad under floor/fixed on walls and in pipe shafts etc. complete. The quoted rate should include lead and lifting charges to all levels, necessary scaffolding and supports like hanger supports grip bolts and CV sheet 304 grade clamps etc. with prior approval of concerned Superintending Engineer.	As directed by Engineer-in-charge			

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1800		a		a) 50 mm dia		Running metre	1100.00	110.00
1801		b		b) 65 mm dia		Running metre	1280.00	128.00
1802		c		c) 75 mm dia		Running metre	1380.00	138.00
1803		d		d) 100 mm dia		Running metre	1600.00	160.00
1804		e		e) 150 mm dia		Running metre	2850.00	285.00
1805		f		f) 200 mm dia		Running metre	4750.00	285.00
				SSR 2019-20 Additional New items				

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
BUILDING WORKS								
1806	Accoustic	51.01		Providing & Fixing in position, Acoustical Panelling made from Fabric wrapped Compressed polyester fibre nonwoven 9 mm panels on, 50 x 50 mm sal-wood frame of 600 x 600 c to c having wooden supports from wall of required length, in front of 1000 gsm synthetic wool 50 mm thick with chicken mesh on wall side, including cost of required Cut-Outs, decorative mouldings / finishing-items / paint & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects.including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	4590	1375
1807	Accoustic	51.02		Providing & Fixing in position, Acoustical Panelling made from Wood-wool board 20mm on, 50 x 50 mm Sal-wood frame of 600 x 600 c to c having wooden supports from wall of required length, in front of 1000 Gsm synthetic wool 50 mm thick with chicken mesh on wall side, including cost of required Cut-Outs, decorative mouldings / finishing-items / paint & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects. including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	3430	1025
1808	Accoustic	51.03		Providing & Fixing in position, Acoustical Panelling made from Gypsum plain 12mm panels on, 50 x 50 mm Sal-wood frame of 600 x 600 c to c having wooden supports from wall of required length, in front of 1000 Gsm synthetic wool 50 mm thick with chicken mesh on wall side, including cost of required Cut-Outs, decorative mouldings / finishing-items / paint & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects. including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	2300	690
1809	Accoustic	51.04		Providing & Fixing in position, Acoustical Panelling made from 12mm wp Ply wood & 1.5mm laminate on, 50 x 50 mm Sal-wood frame of 600 x 600 c to c having wooden supports from wall of required length, in front of 1000 Gsm synthetic wool 50 mm thick with chicken mesh on wall side, including cost of required Cut-Outs, decorative mouldings / finishing-items / paint & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects.including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	5090	1500
1810	Accoustic	51.05		Providing & Fixing in position Acoustical Doors along with 150 x 150 mm teak wood frame, doors made from 50mm Teak wood frame 600 x600 c to c filled with 1000 Gsm synthetic wool 50mm thick and 3mm Tecsound from both sides, 12mm waterproof ply & veneer from both sides , including 150mm heavy duty SS hinges (Geze / Dorma or eq.) 4 no each leaf, with Door-closer (Dorma / Geze or eq.) including cost of required Cut-Outs, decorative mouldings / finishing-items / melamine polish & Scaffolding as per Architectural & Acoustical Design & Instructions & Complete in all aspects .including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	23700	7100

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1811	Accoustic	51.06		Providing & fixing in position Stage flooring Made from 18mm plywood 1200 x 2400 & 18mm Teakwood planks 100 x 800 having tongue & groove on Sal-wood frame of 50 x 100 at 600mm c to c on stage surface including cost of required Cut-Outs, decorative mouldings / finishing-items / polish etc., as per Architectural & Acoustical Design & Instructions & Complete in all aspects. .including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	8215	2460
1812	Accoustic	51.07		Providing & Fixing in position, Acoustical Ceiling made from Gypsum Plain Panels on approved heavy duty G.I. frame ceiling channels at 450 c to c, & intermediate channels not more than 1200 c to c, along with ply wood forms suspended with Hangers from Roof, in front of 1000 Gsm synthetic wool 50 mm thick, with Paint, including cost of required Cut-Outs, decorative mouldings / finishing-items & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects.including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	1465	430
1813	Accoustic	51.08		Providing & Fixing in position, Acoustical Ceiling made from Compressed polyester fibre nonwoven 9mm panels on approved heavy duty GI frame 300 mm c to c & intermediate channels at 1200 mm c to c, suspended with Hangers from Roof, including cost of required Cut-Outs, decorative mouldings / finishing-items & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	2865	850
1814	Accoustic	51.09		Providing & Fixing in position, Acoustical Ceiling made from Rigitone 8/18 perforated panels on approved heavy duty G.I. frame, ceiling channels at 300 c to c, & intermediate channels not more than 1200 c to c, suspended with Hangers from Roof, in front of 1000 Gsm synthetic wool 50 mm thick, with Paint, including cost of required Cut-Outs, decorative mouldings / finishing-items & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	4135	1200
1815	Accoustic	51.10		Providing & Fixing in position, Acoustical Panelling made from 12mm thick Agro wood strips of 50, 75 7 100 mm width on 50 x 50 mm Sal-wood frame of 600 x 600 c to c having supports from wall of required length, in front of 1000 gsm synthetic wool 50 mm thick with approved coloured fabric on strips side & chicken mesh on wall side, including cost of required Cut-Outs, decorative mouldings / finishing-items / Melamine Polish & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects. including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	5075	1500

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1816	Accoustic	51.11		Providing & Fixing in position, Fabric wrapped Compressed polyester fibre nonwoven 9mm panels above the wood wool board panelling or existing sal wood frame, using adhesive, as per Architectural & Acoustical Design & Instructions & Complete in all aspects. including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	2950	875
1817	Accoustic	51.12		Providing & Fixing in position, Partition made from 12mm thick Gypsum from both sides on 50 x 50 mm Sal-wood frame of 600 x 600 c to c, having of 800 gsm synthetic wool 50 mm thick in between, including cost of required Cut-Outs & Scaffolding, as per Architectural & Acoustical Design & Instructions & Complete in all aspects including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	2524	750
1818	Accoustic	51.13		Providing & Fixing in position, Carpet more than 800+ gsm, made with100% stain proof fibres of approved make along with 5mm underlay as per Architectural & Acoustical Design & Instructions & Complete in all aspects including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	1450	435
1819	Accoustic	51.14		Providing & Fixing in position, 1000 mm wide Auto-glow Aluminium extruded strips on auditorium steps as per Design & Instructions & Complete in all aspects. Make Piccolo or Nexus	As directed by Engineer-in-charge	Number	1410	420
1820	Accoustic	51.15		Providing & Fixing in position, 12mm wp Ply wood & 1.5mm laminate panels above the fabricated frame on one side , as per Architectural & Acoustical Design & Instructions & Complete in all aspects. including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Square Metre	3170	950
1821	Accoustic	51.16		Providing & Fixing in position, MS fabrication work using angles, sqr tubes, c channels etc for various partition frame as per Design & Instructions & Complete in all aspects . including all materials labour,finishing etc complete	As directed by Engineer-in-charge	Kilogram	85	25
1822	Accoustic	51.17		Providing & Fixing in position, Under Deck insulation for metal deck using 1000 Gsm synthetic wool with fixed to deck using adhesive and chicken mesh.	As directed by Engineer-in-charge	Square Metre	740	220

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1823	Accoustic	51.18		Providing & fixing in position, heavy duty fully upholstered Auditorium chairs 520 mm c to c tip-up type. Height of back should be less than 1030 mm with plastic protective cover on back and bottom having teak wood handles. Back to back distance is 1000mm. The auditorium chairs should be of following specifications 1. Powder Coated Heavy duty MS Stand. 2. Individually moulded , ergonomically designed seat and back cushions. 3.Moulded Polyurethane Foam cushion. PU foam density 48 – 52 Kilograms/cu.mtr 4. Moulded Polyurethane Foam manufactured in certified ISO 9001 facility to ensure consistency in density for longevity .5.Upholstered in Foam laminated stretch sandwich Fabric for clean finish and soft comfortable feel as per the colour & pattern selected by the client. 6.Seat and Back should have moulded synthetic protective cover. 7. Wooden or PU armrest 65mm x 20mm - 330mm long . 8.Mounted using Anchor fasteners.	As directed by Engineer-in-charge	Number	6000	1800
1824	Accoustic	51.19		Providing and Fixing Rollar Blinds AMI Make or approved make & shade of 38mm round Aluminium channel with Blackout fabric & telting with chain (Ball) system with all necessary fixtures and fitting etc. complete. (Sample to be final by Engineer In-charge prior execution of work)	As directed by Engineer-in-charge	Square Metre	2152	645
1825	Accoustic	51.20		Providing and Fixing Vertical Blinds of approved Make and shade of 100mm regular fabric with powder coated aluminium channel with telting PVC chain & bottom weight plate with all necessary fixtures and fitting etc. complete. (Sample to be final by Engineer In-charge prior execution of work)	As directed by Engineer-in-charge	Square Metre	1025.00	300.00
1826	Furniture	51.21		Executive's Table @ 1800Lx900Dx750HT Providing & Fixing of Table @ 1800Lx900Dx750HT - TOP & GABLE END to be made of Membrane finish with soft water fall edges & curved panel & Decorated Anodized section MODESTY PANEL to be made of 18 mm thick Prelaminated particle board with PVC edge band as per drawing	As directed by Engineer-in-charge	Number	17231.00	---
1827	Furniture	51.22		Pedestal Unit @ 420Lx450Dx650HT Providing & Fixing of PEDESTAL @ 420Lx450Dx650HT :- To be made out of Complete Membrane consist of three Drawers as per drawing.	As directed by Engineer-in-charge	Number	9004.00	---
1828	Furniture	51.23		Credestal @ 1200Lx450Lx650HT Providing & Fixing of LOW HEIGHT CREDESTAL @ 1200L X 450D X 650H :- To be made out of Membrane Finish (2 Openable Shutter & 3 Drawer Pedestal in between)as per drawing.	As directed by Engineer-in-charge	Number	17498.00	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1829	Furniture	51.24		Executive Table @ 2250Lx2100Dx750HT including Low Height Credestal @ 1200Lx450Dx650HT Providing & Fixing of Table @ 2250Lx2100Dx750HT TOP & GABLE END to be made of Membrane finish with soft water fall edges & curved panel & Decorated Anodized section MODESTY PANEL to be made of 18 mm thick Prelaminated particle board with PVC edge band. INCLUDING CREDESTAL @ 1200L X 450D X 650H :- To be made out of Membrane Finish (2 Openable Shutter & 3 Drawer Pedestal in between) as per drawing.	As directed by Engineer-in-charge	Number	42635.00	---
1830	Furniture	51.25		Medium Height Partition @ 1800/1200HT TILE BASED PARTITION SYSTEM:- Tile based Aluminum partition system of 1800/1200 mm ht. made of 60mm thk aluminum frames having two separate race ways for laying electrical & computer wiring. The wire management shall be through to the race way to be fitted at bottom of partition and other immediately below of work top with hook on type raceway cover for easy access of wires. Frames to be joined by aluminum connectors with M6 x 16 pan-head machin screw and washer with aluminum post cover. Post cover of snap on fashion to be connected on aluminum connectors. All visible aluminium to be in anodized finish. The top/ exposed sides of the frame and posts should be covered with horizontal/ Vertical trim and caps made of Aluminum in anodized finish in order to enhance its look.Upper tiles of partition to be in Soft Board or Marker tile of 9mm. thk., and prelaminate partical board lower tiles in laminate finish of 9mm. thk. on both the sides.	As directed by Engineer-in-charge	Number	7552.00	---
1831	Furniture	51.26		Free Standing Table @ 1500Lx600Dx750HT Providing and fixing Table of Size 1500 x 600 x 750 mm. Top: made from 25 mm Prelaminated Particle board. All edges are covered by 2 mm. Thk. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Legs : C Shape made from CRCA Sheet with Powder Coat finish. Modesty panel : Made from 18mm both side prelaminate particle boards.All edges are covered by 0.8mm PVC edge bands glued by hot melt glue applied by auto edge banding machine.KEYBOARD TRAY (WITHOUT MOUSE TRAY) :- Metal Powder Coated - Black Color, CPU TROLLEY :- Metal Powder Coated - Black Color, 3 DRAWER PEDESTAL UNIT having overall size 392L x 450D x 680Ht. mm. with central lock and key. Drawers and body are complete metal with powder coat finish, facia in 18 mm prelaminate particle board,	As directed by Engineer-in-charge	Number	16893	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1832	Furniture	51.27		<u>Free Standing Table @ 1350Lx600Dx750HT</u> Providing and fixing Table of Size 1350 x 600 x 750 mm. Top: made from 25 mm Prelaminated Particle board. All edges are covered by 2 mm. Thk. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Legs : C Shape made from CRCA Sheet with Powder Coat finish. Modesty panel : Made from 18mm both side prelaminated particle boards.All edges are covered by 0.8mm PVC edge bands glued by hot melt glue applied by auto edge banding machine.KEYBOARD TRAY (WITHOUT MOUSE TRAY) :- Metal Powder Coated - Black Color, CPU TROLLEY :- Metal Powder Coated - Black Color, 3 DRAWER PEDESTAL UNIT having overall size 392L x 450D x 680Ht. mm. with central lock and key. Drawers and body are complete metal with powder coat finish, facia in 18 mm prelaminated particle board,	As directed by Engineer-in-charge	Number	16411	---
1833	Furniture	51.28		<u>Free Standing Table @ 1200Lx600Dx750HT</u> Providing and fixing Table of Size 1200 x 600 x 750 mm. Top: made from 25 mm Prelaminated Particle board. All edges are covered by 2 mm. Thk. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Legs : C Shape made from CRCA Sheet with Powder Coat finish. Modesty panel : Made from 18mm both side prelaminated particle boards.All edges are covered by 0.8mm PVC edge bands glued by hot melt glue applied by auto edge banding machine.KEYBOARD TRAY (WITHOUT MOUSE TRAY) :- Metal Powder Coated - Black Color, CPU TROLLEY :- Metal Powder Coated - Black Color, 3 DRAWER PEDESTAL UNIT having overall size 392L x 450D x 680Ht. mm. with central lock and key. Drawers and body are complete metal with powder coat finish, facia in 18 mm prelaminated particle board,	As directed by Engineer-in-charge	Number	14436	---
1834	Furniture	51.29		<u>Library Area Table @ 1350Lx750Dx750HT</u> Providing & Fixing of FREE STANDING TABLE @ 1350Lx750Dx 750HT:- TOP to be made of 25 mm thick Prelaminated particle board with PVC edge band, BENT LEG to be CHROME FINISH as per drawing.	As directed by Engineer-in-charge	Number	10897	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1835	Furniture	51.30		Providing & Fixing Curvilinear Workstation @ 1500/1500Lx600/600Dx750HT Providing & Fixing Curvilinear Workstation @ 1500/1500Lx600/600Dx750HT, Curvilinear Table Top @ 1500/1500Lx600/600D :- TOP to be made of 25 mm thick Prelaminated particle board with PVC edge band, GABLE END to be made of 25 mm thick Prelaminated particle board with PVC edge band, KEYBOARD TRAY (WITHOUT MOUSE TRAY) :- Metal Powder Coated - Black Color, CPU TROLLEY :- Metal Powder Coated - Black Color, along with 3 DRAWER PEDESTAL UNIT having overall size 392L x 450D x 680Ht. mm. with central lock and key. 3 Drawers and body are complete metal with powder coat finish, fascia in 18 mm prelaminated particle board,	As directed by Engineer-in-charge	Number	15767	---
1836	Furniture	51.31		Conference Table @ 3600Lx1400Dx750HT Providing & Fixing of Main Table @ 3600Lx1400Dx750HT - made up of 18+18mm Thick MDF top with PVC Membrane finish and waterfall edge profile. Aluminium Anodized finish beeding of 4mm thick is running all over the table top edge. Gable ends is Aerofoiled Shape with front edges in PVC Membrane finish and rest in Prelaminated MDF with batton structure. Gable ends should be hollow from inside for the provision of passing electrical and Data wiring. , MODESTY PANEL:- to be made of 18 mm thick Prelaminated particle board with PVC edge band Access Flap:- For Wire manager 2 Nos.	As directed by Engineer-in-charge	Number	99105	---
1837	Furniture	51.32		Conference Table @ 1800 x 900 x 750 mm Ht. Providing & Fixing of Main Table @ 1800Lx900Dx750HT - made up of 18+18mm Thick MDF top with PVC Membrane finish and waterfall edge profile. Aluminium Anodized finish beeding of 4mm thick is running all over the table top edge. Gable ends is Aerofoiled Shape with front edges in PVC Membrane finish and rest in Prelaminated MDF with batton structure. Gable ends should be hollow from inside for the provision of passing electrical and Data wiring. , MODESTY PANEL:- to be made of 18 mm thick Prelaminated particle board with PVC edge band Access Flap:- For Wire manager 1 Nos.	As directed by Engineer-in-charge	Number	21108	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1838	Furniture	51.33		12 Seater Reading Table for Library @ 3600Lx1200Dx750HT Providing and Fixing 12 Seater Reading Table for Library @ 3600Lx1200Dx750HT Top: made from 25 mm Prelaminated Particle board. All edges are covered by 2 mm. Thk. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Gable Ends : made from 25 mm Prelaminated Particle board. All edges are covered by 2 mm. Thk. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Modesty panel : Made from 18mm both side prelaminated particle boards.All edges are covered by 0.8mm PVC edge bands glued by hot melt glue applied by auto edge banding machine.	As directed by Engineer-in-charge	Number	29536	---
1839	Furniture	51.34		3 DRAWER PEDESTAL UNIT @ 392L x 450D x 680Ht. mm. 3 DRAWER PEDESTAL UNIT having overall size 392L x 450D x 680Ht. mm. with central lock and key. 3 Drawers and body are complete metal with powder coat finish, facia in 18 mm prelaminated particle board.	As directed by Engineer-in-charge	Number	8108	---
1840	Furniture	51.35		Low Height Openable Storage @ 900Lx450x750HT Providing and fixing Openable Steel Storage of 900 x 450 x 750Ht, with 2 adjustable shelves, Complete body & shutter made in 0.8 mm thick & Top in 2 mm thick CRCA, 2 Shutter to be mounted with the help of cup hinges, and 4 adjustable levelers, enitre storage in powder coated finish with 60 to 80 microns. with 25 mm. thk additional Top on top of storage as as per drawing	As directed by Engineer-in-charge	Number	12646	---
1841	Furniture	51.36		Medium Height Steel Storage @ 750Lx450Dx1200HT Providing and fixing Openable Steel Storage of 750 x 450 x 1200Ht, with 2 adjustable shelves, Complete body & shutter made in 0.8 mm thick & Top in 2 mm thick CRCA, 2 Shutter to be mounted with the help of cup hinges, and 4 adjustable levelers, enitre storage in powder coated finish with 60 to 80 microns. with 25 mm. thk. as per drawing.	As directed by Engineer-in-charge	Number	15452	---
1842	Furniture	51.37		Full Height Steel Storage @ 750Lx450Dx2100HT Providing and fixing Openable Steel Storage of 750 x 450 x 2100Ht, with 4 adjustable shelves, Complete body & shutter made in 0.8 mm thick & Top in 2 mm thick CRCA, 4 Shutter to be mounted with the help of cup hinges, and 4 adjustable levelers, enitre storage in powder coated finish with 60 to 80 microns as as per drawing.	As directed by Engineer-in-charge	Number	18925	---
1843	Furniture	51.38		Multiple Compartment Lockers @ 1140Lx 457D x 1830 mm. Ht. Providing and fixing Multiple Compartment Lockers @ 1140Lx 457D x 1830 mm. Ht. with 12 Compartments , Complete body & shutter made of CRCA Sheet with powder coated finish as per approved color.	As directed by Engineer-in-charge	Number	43427	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1844	Furniture	51.39		Book Case with Glass Shutter @ 825Lx300Dx1650HT Providing & Fixing of Book Case with Glass Shutter @ 825Lx300Dx1650HT:- To be made out of complete body & in 0.7mm thick CRCA & Shutter in 1.2mm thick CRCA with glass pannel in Powder coating finish as per drawing.	As directed by Engineer-in-charge	Number	26727	---
1845	Furniture	51.40		Providing & Arrangemnt of High Back, Synchronized Mechanism with Multiple Locking, Adjustable Armrest, Gaslift for Seat height adjustment, Standard 5-prong P/Nylon Base with Leatherite Upholstery	As directed by Engineer-in-charge	Number	17371	---
1846	Furniture	51.41		Providing & Arrangemnt of High Back Chair - TILT MECHANISM WITH MULTILOCKING, HIGH DENSITY CUSHION ON SEAT COMPOSITE LEATHER WITH METALLIC SILVER FINISH BASE AND ARMS WITH P.U.CASTORS GASLIFT FOR HEIGHT ADJUSTMENT.	As directed by Engineer-in-charge	Number	15474	---
1847	Furniture	51.42		Providing & Arrangemnt of Mid Back, Normal Syncro Mechanism , Fixed Armrest , Gaslift for Seat height adjustment, Standard 5-prong/Nylon Base with Leather Upholstery	As directed by Engineer-in-charge	Number	9563	---
1848	Furniture	51.43		Providing & Arrangemnt of Mid Back, ECO CTS Mechanism , Fixed Armrest , Gaslift for Seat height adjustment, Standard 5-prong P/Nylon Base with Fabric Upholstery	As directed by Engineer-in-charge	Number	6520	---
1849	Furniture	51.44		Public Seating Chair. - 3 Seater Providing and Fixing 3 seater Public seating chair made of complete metal with Legs in Crome finish and seates in silver powder coating finish.	As directed by Engineer-in-charge	Number	18056	---
1850	Furniture	51.45		Double Faced Mobile Unit for Compactor 2150mmH x 2745mmW x 900mmD Providing and fixing Double Faced Mobile Unit for Compactor 2150mmH x 2745mmW x 900mmD - BASE FRAME : Base Frame shall be fabricated in channel Type from minimum 2.5 mm thick MS Sheet Size of Channel 25mm x 100mm x 45mm. GUIDE RAILS : The guide rails shall be made out of 28mm Bright bar placed on 1.2 mm thick M.S. Plate which will be above the floor and are as per the international standard of safety. SUPER STRUCTURE : Super structure of the Mobile storage system will consist of knock down type panels. All the components such as shelves, front panel, end panel, vertical rear panel, central partition etc. Will act as an integral member of the Unit. SHELVES : Shelves made of 22SWG thick Prime Quality C.R.C.A. having 10 folds each will be provided each designed to carry a U.D.L. of 70 Kilograms. VERTICAL PANEL : Vertical panel consists of the front, Centre & rear panel shall be made out of 20SWG thick C.R.C.A. Prime quality Mild Steel & designed to take the load of shelves.	As directed by Engineer-in-charge	Number	135808	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1851				DRIVE COVER PANEL : Made out of 22SWG thick C. R.C. A. prime quality Steel to cover the entire drive mechanism. CENTRE PARTITION : The Centre partition will comprise of a full C.R.C.A. prime quality Mild Steel 22SWG Sheet. LOCKING : System will be provided with individual rack locking as well as centralised locking arrangement on the last unit when all units are brought together, central lock when operated gets locked with the floor & does not allow access to the units. DRIVE MECHANISM : Driving Mechanism will be provided externally supported on special grade anti-friction bearing to have smooth & effortless movement. Entire mechanism or gear & sprockets shall be incorporated within the front panel provided in the front of the unit within an area of 1000mm x 200mm x 60mm. DRIVING WHEEL : Fully Powder Coated three pronged drive wheel for better torque & free movement of the rack over the guide rail. INDEXING ARRANGEMENT : Acrylic card holders provided on the front panel for easy identification & retrieval. FINAL FINISH : Powder Coating (8 tanks process with 70 microns).				
1852	Furniture	51.46		Single Faced Mobile Unit for Compactor 2150mmH x 2745mmW x 457mmD Providing and fixing Single Faced Mobile Unit for Compactor 2150mmH x 2745mmW x 457mmD - BASE FRAME : Base Frame shall be fabricated in channel Type from minimum 2.5 mm thick MS Sheet Size of Channel 25mm x 100mm x 45mm. GUIDE RAILS : The guide rails shall be made out of 28mm Bright bar placed on 1.2 mm thick M.S. Plate which will be above the floor and are as per the international standard of safety. SUPER STRUCTURE : Super structure of the Mobile storage system will consist of knock down type panels. All the components such as shelves, front panel, end panel, vertical rear panel, central partition etc. Will act as an integral member of the Unit. SHELVES : Shelves made of 22SWG thick Prime Quality C.R.C.A. having 10 folds each will be provided each designed to carry a U.D.L. of 70 Kilograms. VERTICAL PANEL : Vertical panel consists of the front, Centre & rear panel shall be made out of 20SWG thick C.R.C.A. Prime quality Mild Steel & designed to take the load of shelves. DRIVE COVER PANEL : Made out of 22SWG thick C. R.C. A. prime quality Steel to cover the entire drive mechanism. CENTRE PARTITION : The	As directed by Engineer-in-charge	Number	99768	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1853				Centre partition will comprise of a full C.R.C.A. prime quality Mild Steel 22SWG Sheet. LOCKING : System will be provided with individual rack locking as well as centralised locking arrangement on the last unit when all units are brought together, central lock when operated gets locked with the floor & does not allow access to the units. DRIVE MECHANISM : Driving Mechanism will be provided externally supported on special grade anti-friction bearing to have smooth & effortless movement. Entire mechanism or gear & sprockets shall be incorporated within the front panel provided in the front of the unit within an area of 1000mm x 200mm x 60mm. DRIVING WHEEL : Fully Powder Coated three pronged drive wheel for better torque & free movement of the rack over the guide rail. INDEXING ARRANGEMENT : Acrylic card holders provided on the front panel for easy identification & retrieval. FINAL FINISH : Powder Coating (8 tanks process with 70 microns).				
1854	Furniture	51.47		Single Faced Fixed Unit for Compactor 2150mmH x 2745mmW x 457mmD Providing and fixing Single Faced Fixed Unit for Compactor 2150mmH x 2745mmW x 457mmD - BASE FRAME : Base Frame shall be fabricated in channel Type from minimum 2.5 mm thick MS Sheet Size of Channel 25mm x 100mm x 45mm. GUIDE RAILS : The guide rails shall be made out of 28mm Bright bar placed on 1.2 mm thick M.S. Plate which will be above the floor and are as per the international standard of safety. SUPER STRUCTURE : Super structure of the Mobile storage system will consist of knock down type panels. All the components such as shelves, front panel, end panel, vertical rear panel, central partition etc. Will act as an integral member of the Unit. SHELVES : Shelves made of 22SWG thick Prime Quality C.R.C.A. having 10 folds each will be provided each designed to carry a U.D.L. of 70 Kilograms. VERTICAL PANEL : Vertical panel consists of the front, Centre & rear panel shall be made out of 20SWG thick C.R.C.A. Prime quality Mild Steel & designed to take the load of shelves. DRIVE COVER PANEL : Made	As directed by Engineer-in-charge	Number	64014	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1855				out of 22SWG thick C. R.C. A. prime quality Steel to cover the entire drive mechanism. CENTRE PARTITION : The Centre partition will comprise of a full C.R.C.A. prime quality Mild Steel 22SWG Sheet. LOCKING : System will be provided with individual rack locking as well as centralised locking arrangement on the last unit when all units are brought together, central lock when operated gets locked with the floor & does not allow access to the units. DRIVE MECHANISM : Driving Mechanism will be provided externally supported on special grade anti-friction bearing to have smooth & effortless movement. Entire mechanism or gear & sprockets shall be incorporated within the front panel provided in the front of the unit within an area of 1000mm x 200mm x 60mm. DRIVING WHEEL : Fully Powder Coated three pronged drive wheel for better torque & free movement of the rack over the guide rail. INDEXING ARRANGEMENT : Acrylic card holders provided on the front panel for easy identification & retrieval. FINAL FINISH : Powder Coating (8 tanks process with 70 microns).				
1856	Furniture	51.48		Double Faced Mobile Unit for Compactor 2150mmH x 1830mmW x 900mmD Providing and fixing Double Faced Mobile Unit for Compactor 2150mmH x 1830mmW x 900mmD - BASE FRAME : Base Frame shall be fabricated in channel Type from minimum 2.5 mm thick MS Sheet Size of Channel 25mm x 100mm x 45mm. GUIDE RAILS : The guide rails shall be made out of 28mm Bright bar placed on 1.2 mm thick M.S. Plate which will be above the floor and are as per the international standard of safety. SUPER STRUCTURE : Super structure of the Mobile storage system will consist of knock down type panels. All the components such as shelves, front panel, end panel, vertical rear panel, central partition etc. Will act as an integral member of the Unit. SHELVES : Shelves made of 22SWG thick Prime Quality C.R.C.A. having 10 folds each will be provided each designed to carry a U.D.L. of 70 Kilograms. VERTICAL PANEL : Vertical panel consists of the front, Centre & rear panel shall be made out of 20SWG thick C.R.C.A. Prime quality Mild Steel & designed to take the load of shelves. DRIVE COVER PANEL : Made out of 22SWG thick C. R.C. A. prime quality Steel to cover the entire drive mechanism. CENTRE PARTITION : The Centre partition will comprise of a full C.R.C.A. prime quality Mild Steel 22SWG Sheet. LOCKING : System will be provided	As directed by Engineer-in-charge	Number	95652	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1857				with individual rack locking as well as centralised locking arrangement on the last unit when all units are brought together, central lock when operated gets locked with the floor & does not allow access to the units. DRIVE MECHANISM : Driving Mechanism will be provided externally supported on special grade anti-friction bearing to have smooth & effortless movement. Entire mechanism or gear & sprockets shall be incorporated within the front panel provided in the front of the unit within an area of 1000mm x 200mm x 60mm. DRIVING WHEEL : Fully Powder Coated three pronged drive wheel for better torque & free movement of the rack over the guide rail. INDEXING ARRANGEMENT : Acrylic card holders provided on the front panel for easy identification & retrieval. FINAL FINISH : Powder Coating (8 tanks process with 70 microns).				
1858	Furniture	51.49		Single Faced Mobile Unit for Compactor 2150mmH x 1830mmW x 457mmD Providing and fixing Single Faced Mobile Unit for Compactor 2150mmH x 1830mmW x 457mmD - BASE FRAME : Base Frame shall be fabricated in channel Type from minimum 2.5 mm thick MS Sheet Size of Channel 25mm x 100mm x 45mm. GUIDE RAILS : The guide rails shall be made out of 28mm Bright bar placed on 1.2 mm thick M.S. Plate which will be above the floor and are as per the international standard of safety. SUPER STRUCTURE : Super structure of the Mobile storage system will consist of knock down type panels. All the components such as shelves, front panel, end panel, vertical rear panel, central partition etc. Will act as an integral member of the Unit. SHELVES : Shelves made of 22SWG thick Prime Quality C.R.C.A. having 10 folds each will be provided each designed to carry a U.D.L. of 70 Kilograms. VERTICAL PANEL : Vertical panel consists of the front, Centre & rear panel shall be made out of 20SWG thick C.R.C.A. Prime quality Mild Steel & designed to take the load of shelves. DRIVE COVER PANEL : Made out of 22SWG thick C. R.C. A. prime quality Steel to cover the entire drive mechanism. CENTRE PARTITION : The	As directed by Engineer-in-charge	Number	69900	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1859				Centre partition will comprise of a full C.R.C.A. prime quality Mild Steel 22SWG Sheet. LOCKING : System will be provided with individual rack locking as well as centralised locking arrangement on the last unit when all units are brought together, central lock when operated gets locked with the floor & does not allow access to the units. DRIVE MECHANISM : Driving Mechanism will be provided externally supported on special grade anti-friction bearing to have smooth & effortless movement. Entire mechanism or gear & sprockets shall be incorporated within the front panel provided in the front of the unit within an area of 1000mm x 200mm x 60mm. DRIVING WHEEL : Fully Powder Coated three pronged drive wheel for better torque & free movement of the rack over the guide rail. INDEXING ARRANGEMENT : Acrylic card holders provided on the front panel for easy identification & retrieval. FINAL FINISH : Powder Coating (8 tanks process with 70 microns).				
1860	Furniture	51.50		Single Faced Fixed Unit for Compactor 2150mmH x 1830mmW x 457mmD Providing and fixing Single Faced Fixed Unit for Compactor 2150mmH x 1830mmW x 457mmD - BASE FRAME : Base Frame shall be fabricated in channel Type from minimum 2.5 mm thick MS Sheet Size of Channel 25mm x 100mm x 45mm. GUIDE RAILS : The guide rails shall be made out of 28mm Bright bar placed on 1.2 mm thick M.S. Plate which will be above the floor and are as per the international standard of safety. SUPER STRUCTURE : Super structure of the Mobile storage system will consist of knock down type panels. All the components such as shelves, front panel, end panel, vertical rear panel, central partition etc. Will act as an integral member of the Unit. SHELVES : Shelves made of 22SWG thick Prime Quality C.R.C.A. having 10 folds each will be provided each designed to carry a U.D.L. of 70 Kilograms. VERTICAL PANEL : Vertical panel consists of the front, Centre & rear panel shall be made out of 20SWG thick C.R.C.A. Prime quality Mild Steel & designed to take the load of shelves. DRIVE COVER PANEL : Made out of 22SWG thick C. R.C. A. prime quality Steel to cover the entire drive mechanism. CENTRE PARTITION : The Centre partition will comprise of a full C.R.C.A. prime quality	As directed by Engineer-in-charge	Number	44223	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1861				Mild Steel 22SWG Sheet. LOCKING : System will be provided with individual rack locking as well as centralised locking arrangement on the last unit when all units are brought together, central lock when operated gets locked with the floor & does not allow access to the units. DRIVE MECHANISM : Driving Mechanism will be provided externally supported on special grade anti-friction bearing to have smooth & effortless movement. Entire mechanism or gear & sprockets shall be incorporated within the front panel provided in the front of the unit within an area of 1000mm x 200mm x 60mm. DRIVING WHEEL : Fully Powder Coated three pronged drive wheel for better torque & free movement of the rack over the guide rail. INDEXING ARRANGEMENT : Acrylic card holders provided on the front panel for easy identification & retrieval. FINAL FINISH : Powder Coating (8 tanks process with 70 microns).				
1862	Furniture	51.51		Stool for Lab and Class-IV Providing and fixing 4 legged Lab stool, Legs made of 16 Guage 45 MM Outer dimension MS Pipe, Duly painted, With a 304 Grade Stainless steel 12 inch wide seat with a 1 inch collar, Height adjustment via a screw. as per design and drawing and instructions of Engineer in charge.	As directed by Engineer-in-charge	Number	2617	---
1863	Furniture	51.52		Alluminium foldable ladder for store Providing & Fixing Foldable Alluminum Ladder 1500 mm. Ht.	As directed by Engineer-in-charge	Number	3961	---
1864	Furniture	51.53		Sofa Set 3+1+1 Providing & fixing Sofa Set 3+1+1 Brown and Cream leather DIMENSION Length: 182.5 (cms) Breadth (cms): 100 (cms)Height (cms): 100 (cms) Weight (Kilograms): 66 (Kilogram) Seating Capacity: Five Seat	As directed by Engineer-in-charge	Number	39612	---
1865	Furniture	51.54		Tea Table 900mm X 750mm X 450mm for m.s. ante chamber Providing And Fixing Of Tea Table 900mm X 750mm X 450mm With 12mm Thick Colour Etched Tempered Glass With Bevelled Drawing Made Out Of 18mm Thick Waterproofing Ply. The Outer Laces To Be Finished With High Quality 4 Mm Thik Veneer Or 1 Mm Thik Mica Etc.	As directed by Engineer-in-charge	Number	11123	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1866	Furniture	51.55		Single Bed @ 2025LX 1000DX 650H Providing and fixing Single Bed of Size 2025Lx1000Dx650H with mattress and pillow. Understructure: - The legs are made of Square tube of size 25 x 25mm made out of MS with a thickness of 1.2 mm. The legs should have corner brackets welded to it at two levels. The corner brackets are made of 2mm thick CRCA having a L shaped structure to join the side panels and headboard to the leg. Three nos. of Horizontal stiffeners are provided at equal intervals. The stiffeners are made of Square tube of size 25 x 25mm made out of MS with a thickness of 1.2mm. The middle Horizontal Stiffener has a leg attached to it to transfer the load to the ground and add to the strength and stability of the complete structure. This leg is also made of Square tube of size 25 x 25mm made out of MS with a thickness of 1.2mm. All Metal components to undergo 7 tank treatment process and should be powder coated to the thickness of minimum 50 Microns DFT.	As directed by Engineer-in-charge	Number	19367	---
				Side Panel: - The side panels are made up of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding. The overall width of the side panel is 150mm. The side panels have 18mm thick prelam particle board Baton running for required length to add rigidity to the structure. Head Board :- The head board is made up of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding. The head board size to be considered as 1000 x 650mm. Foot Board :- The foot board is made up of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding. The head board size to be considered as 1000 x 450mm. Bed Base: - The Bed Base is made up of 12mm thick Prelam Particle Board with both side White laminate.				
1867	Furniture	51.56		Dressing Table @400LX 400DX 1800H Providing & Fixing Dressing Table of size 400LX 400DX 1800H. The Dressing table unit is made up of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding. The unit has one drawer and one shelf. The dressing table has a mirror of 4mm thick pasted on 18mm thick prelm particle board attached to the base unit. The mirror size considered is 1155 x 360 x 4(t). The mirror has been pasted using high quality 3M sticker.	As directed by Engineer-in-charge	Number	17352	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1868	Furniture	51.57		Wardrobe with Mirror @ 900LX 600DX 1965H Providing and Fixing Wardrobe with Mirror of size 900LX 600DX 1965H The wardrobe side panels and doors are made up of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding. The shelves are made of 18mm thick Prelam Particle Board with decorative laminate on both sides. The top is made of 36mm prelam particle board with decorative laminate on both sides. (18mm Prelam Particle board and 18mm batons on all sides to achieve 36mm overall thickness). The exposed edges of the top are sealed with 2mm thick PVC edge Banding. The top most part of the wardrobe has an aluminum hanger rod of EBCO make. One drawer of size 400(W) x 150(H) x 450 (D) made of 18mm thick prelam Particle Board has been considered. The drawer will have a multipurpose lock of EBCO premium make. The wardrobe handles are Satin SS finish of 160mm pitch. The wardrobe has a multipurpose lock of EBCO make. All hinges considered are Hettich make. Necessary good quality hardwares have been considered as required.	As directed by Engineer-in-charge	Number	40389	---
1869	Furniture	51.58		Bed Side Table @ 400LX 400DX 415H Providing and Fixing Bed Side Table of size 400LX 400DX 415H The bed side unit is made up of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding. The bed side table has one drawer and one shelf. The shelf is made of 18mm thick Prelam Particle Board with both side decorative laminate. All exposed edges are sealed with 2mm thick PVC edge Banding	As directed by Engineer-in-charge	Number	6401	---
1870	Furniture	51.59		Kitchen Trolley Providing and Fixing stainless steel kitchen trolley of overall 26 " height and 22" depth,supported on aluminium pipes ,trolley basket made out of 5 mm stainless steel rod fitted on telescopic channel of size 1.5 " x 20 " x 22 " on both sides of trolley of 12 " or above size, panel having 40Kilogramload bearing capacity of trolley made out of 20 mm PUC coated plywood and colour combination as directed by E-I-C.Inner side of panel covered by white mica ,100 mm s.s. decorative handle.(The width and height of individual compartments shall be kept as directed by Engineer-in-charge)	As directed by Engineer-in-charge	Running metre	1500	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1871	Doors and windows	51.60		Solid Core Flush door Single leaf Providing and fixing factory made solid core flush door in single leaf 35 mm thick, decorative types, of exterior grade, as per detailed drawings, conforming to I.S.:2202 - 1962 (Revised) with approved face veneers on both faces with/without glazing and venetians in the positions shown on the drawings or as directed, all necessary beads, moulding and lipping, holdfasts, mat finish stainless steel fixtures fastenings , finishing with french-polish/ waxing complete. (without door frame).(Sample to be got approved from Ex.Engineer before use) Commercial Hard Wood shutter	As directed by Engineer-in-charge	Square Metre	2750	---
1872	Doors and windows	51.61	BDR	Solid Core Flush door Double leaf Providing and fixing factory made solid core flush door shutters in double leaves 35mm thick,decorative type of exterior grade, as per detailed drawings, conforming to I.S.: 2202 – 1966 (Revised) including approved face veneers on both sides, without glazing and venetians including mat finish stainless steel fixtures and fastening, stoppers and finishing with french polishing etc. (Excluding door frame)(Sample to be got approved from Ex. Engineer before use) Commercial Hard Wood shutter	As directed by Engineer-in-charge	Square Metre	3100	---
1873	Plastering	51.62	BDL	Providing Silica plaster plaster externally in two coats in all positions including base coat of 8 to 10 mm thick curing the same for not less than two days and keeping the surface of base coat rough to receive the final coat treatment 5 to 7 mm thick .finishing the surface by taking out grains and curing for 8 to 10 daysscaffolding etc complete.(The silica plast material shall contain 53 grade OPC cement with pozzolanic materials .size of agreegates shall be of 3 mm having 1:3 proportion with cement.	As directed by Engineer-in-charge	Square Metre	560	331
1874	PWD persons	51.63	BDV	Providing and Fixing toilet set for differently Abled persons consist of Floor Mounted white vitreous china water Closet including 6 litre capacity white vitreous china flushing Cistern with raised soft-push button, white vitreous china wash basin of size 46 x 36 cm and one no SS 304 hinged rail 76 cms & three no SS 304of (Grab Bar) 60 cms all including cutting and making good the walls and floors wherever required ,seat cover, cistern & wash basin fittings,nuts, bolts and gasket etc complete as per the direction of Engineer-In-charge.	As directed by Engineer-in-charge	Square Metre	70780	21000

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1875	PWD persons	51.64	BDT	Providing and fixing ISI marked double swing flush door shutters conforming to IS :2202 (Part I) Non-decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 30 mm thick including ISI marked Stainless Steel L- hinges with necessary screws Fittings & Fixtures per leaf SS kick plates on both sides of the door of 300mm height Heavy Duty satin finish butt SS Hinges (100mm x 75mm x 3mm in size) -4 nos. SS finished lever handle with mortise lock- 1 Number Floor spring- 1 Number 100mm x 100mm safety glass at the specified location	As directed by Engineer-in-charge	Square Metre	12500	3750
1876	PWD persons	51.65		Providing and applying blue and white coloured thermoplastic road marking paints for marking a 3ft x 3 ft universal accessibility symbol within the parking bay as per the drawings and up to the satisfaction of the engineer in charge.	As directed by Engineer-in-charge	Number	1575	470
1877	PWD persons	51.66		Acrylic tactile audio map Design, supply, fabrication and fixing of acrylic, non glare, tactile audio pictorial building layout as per the approved size, design and make, having 6mm thick acrylic non glare base plate of the approved colour and non glare acrylic cut out symbols and upper case Sans Serif letters of 12mm height, raised 3mm above base plate and Grade 2/ Grade 1 Braille to be integral with the sign face and be raised 0.5mm above base plate. The map to be installed at the specified location as per accessibility standards, shall be oriented to the position of the viewer and to be installed at a height of 800 mm from the finished ground/ floor level and using the necessary hardware specified by the manufacturer and to be installed up to the satisfaction of the engineer in charge	As directed by Engineer-in-charge	Number	20790	6237

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1878	PWD persons	51.67	RD	Directional signage Design, supply, fabrication and fixing acrylic multilingual Braille (raised dots) directional signboards of size 6" x 9" designed as per accessibility standards and having 4mm thick acrylic base plate with Upper Case San Serif words made of white acrylic non glare cut out letters of height 15mm raised not less than 0.8mm above base plate and the equivalent word written in Hindi with Devnagri non glare acrylic letters of height 15mm raised not less than 0.8mm above base plate and having a non glare acrylic cut arrow pointing in the required direction. Each signboard to be fixed as per manufacturers specifications on the wall at the approved location and at a height of 1200mm from FFL and as per the directions by the engineer in charge.	As directed by Engineer-in-charge	Number	1633	490
1879	PWD persons	51.68		Floor Directories Providing and fixing acrylic multilingual Braille (raised dots)ADA compliant modular floor directories system on all floors of size1.5' x 2' , showing the floor plan and the list of rooms on that floor, to be installed on each floor near the staircase, designed as per standards and having 4mm thick blue acrylic base plate with Upper Case San Serif words and symbols made of white acrylic non glare cut out letters of height 20mm raised not less than 0.8mm above base plate and the equivalent word/s written in Hindi with Devnagri non glare imported acrylic letters of height 15mm raised not less than 0.8mm above base plate. Grade 2/ Grade 1 Braille to be integral with the sign face and be raised 0.5mm above base plate. Each directory to be fixed as per manufacturers specifications on the wall at the approved location at a height of 1200mm from FFL and as per the directions by the engineer in charge.	As directed by Engineer-in-charge	Number	17418	5225
1880	PWD persons	51.69		Providing an ADA compliant Disability Service Desk having a lowered portion (800mm from FFL) and leg space of 450 mm, having the approved design and of the approved make as per manufacturers specifications	As directed by Engineer-in-charge	Number	22000	6600
1881	PWD persons	51.70		Providing and fixing SS-304 studs having 35mm dia. of the approved brand and make inside the building on all floors in corridors, lobbies level differences etc. as per accessibility standards and as per the installation instructions prescribed by the manufacturer, using the necessary adhesive including finishing work up to the satisfaction of the engineer in charge complete.	As directed by Engineer-in-charge	Number	59	17
1882	PWD persons	51.71		Providing and fixing SS-304 strips of size 280mm x 35mm of the approved brand and make inside the building on all floors in corridors, lobbies level differences etc. as per accessibility standards and as per the installation instructions prescribed by the manufacturer, using the necessary adhesive including finishing work up to the satisfaction of the engineer in charge complete.	As directed by Engineer-in-charge	Number	293	87

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1883	PWD persons	51.72		Providing and fixing Braille indicators for handrails of the approved design and make having Braille dots raised 0.5mm above base plate, to be installed at the specified locations as per the directions of the engineer in charge	As directed by Engineer-in-charge	Number	1500	450
1884	PWD persons	51.73		Providing and fixing stainless steel (Grade 304) railing made of hollow tubes, channels, plates etc. including welding grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories and stainless steel dash fasteners, stainless steel bolts, etc. of the required size on the top of the floor of the side of waste slab with suitable arrangement as per approval of engineer in charge (for payment purpose, only the weight of the stainless steel members shall be considered excluding fixing accessories such as nut bolts, fasteners etc.). 50mm dia. pipe, 1.5mm thickness and weight 1.92Kilogram/ r. metre	As directed by Engineer-in-charge	Kilogram	694	205
1885	PWD persons	51.74		ADA compliant modular Multilingual and tactile Emergency evacuation map of each floor indicating the current position of the viewer saying "YOU ARE HERE" of 15mm height letters in red with white background, indicating the emergency exits, locations of fire extinguishers etc. Signs shall have a solid header with the text "EVACUATION PLAN" in contrasting uppercase letters no less than 3/4" in height. The size of the board shall be 2ft x 2ft and shall be installed at a height of 1200mm from FFL and shall be oriented to the position of the viewer as per the direction of the site engineer	As directed by Engineer-in-charge	Number	19750	5925
1886	PWD persons	51.75		Fire exit and floor identification signage as per manufacturer's specifications, ADA compliant and modular system	As directed by Engineer-in-charge	Number	7500	2250
1887	PWD persons	51.76		Supplying and installing of in position the signages " FIRE ORDER" it should contain the following matter on 3mm thick "Opaque" PVC foam board of computerized cut, PVC Non-reflective self adhesive vinyl painted foam board of 3' x 4'.Product to be ADA compliant and modular system.	As directed by Engineer-in-charge	Number	19780	5934
1888	PWD persons	51.77		Providing an emergency evacuation chair of the approved design, weight and loading capacity	As directed by Engineer-in-charge	Number	73500	22050
1889	PWD persons	51.78		Providing and fixing the reader of the approved brand and make as per the manufacturers specifications and as per the directions of the engineer in charge	As directed by Engineer-in-charge	Number	23100	6930
1890	PWD persons	51.79		Providing and fixing the transmitter of the approved brand and make on each floor as per the manufacturers specifications and as per the directions of the engineer in charge	As directed by Engineer-in-charge	Number	3675	1100

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1891	PWD persons	51.80		Providing and fixing SS Braille buttons in the elevator of the approved brand and make to be installed using the specified adhesive and as per the instructions given by the manufacturer	As directed by Engineer-in-charge	Number	189	56
1892	PWD persons	51.81		Providing and fixing of high intensity reflective conspicuity tape 25 to 50mm width, on edges of treads in staircase including, cutting, pasting etc. of make 3M or equivalent brand as per the direction of engineer in charge	As directed by Engineer-in-charge	Running metre	160	48
1893	PWD persons	51.82		Providing a folding wheelchair of Pioneer Surgicals Brand, model Number PS 809/ equivalent make as per the directions of the engineer in charge.	As directed by Engineer-in-charge	Number	8950	2685
1894	PWD persons	51.83		Design, supply, fabrication and fixing of SS, non glare Signage board (2 ft. x 2 ft.- 1 Number) for the accessible parking, as per the approved design and make, having 1.2mm thick SS non glare base plate and Grade 2/ Grade 1 Braille (raised dots)to be etched/ engraved and be raised 0.5mm above base plate and Upper Case San Serif words and Universal Accessibility Symbol to be etched/ engraved and signage to be installed at a height of 2100mm from the ground level using a post of MS hollow square section (50mm x 50mm) as per the installation procedure specified by the manufacturer and as per accessibility standards and up to the satisfaction of the engineer in charge.	As directed by Engineer-in-charge	Number	23100	6930
1895	PWD persons	51.84		Design, supply, fabrication and fixing of SS, non glare multilingual Braille (raised dots) entrance signage (size 1 ft x 1 ft) as per the approved design and make, indicating the name of the building. Having 1.2mm thick SS non glare blue coloured base plate with the 'Universal Accessibility Symbol' and Upper case Sans Serif words of height 15mm engraved on it along with the equivalent word/ s written in Hindi using Devnagri script of height 15mm in white colour. Grade 2/ Grade 1 Braille to be etched/ engraved and be raised 0.5mm above base plate. The signage to be installed at the specified location on the compound wall near the site entrance gate installed at a height of 1200 mm from the finished ground/ floor level, using the necessary hardware specified by the manufacturer and to be installed up to the satisfaction of the engineer in charge.	As directed by Engineer-in-charge	Number	5969	1791
1896	PWD persons	51.85		Providing and laying in place 300mm x 300mm x 16mm cement tactile directional and warning tiles (for a person with visual impairment)of the approved brand and make and specified colour for outdoor floors such as footpath, courtyard, multimodals location etc. laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes and patterns including grouting the joints with white cement with matching pigments etc. complete as per direction of engineer in charge	As directed by Engineer-in-charge	Square Metre	1550	465

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1897	PWD persons	51.86		Providing and laying in place 300mm x 300mm x 9.8mm vitrified tactile warning and directional tiles of the approved brand, make and colour inside the buildings at in all corridors and lobbies, level differences etc. as per accessibility standards and as per the installation instructions prescribed by the manufacturer including zarri making wherever required and finishing including grouting the joints with white cement with matching pigments etc. up to the satisfaction of the engineer in charge complete.	As directed by Engineer-in-charge	Square Metre	2200	660
1898	PWD persons	51.87		Design, supply, fabrication and fixing acrylic multilingual Braille (raised dots) signboards of size 6"x 9" for room titles, designed as per the drawings issued and having 4mm thick blue acrylic base plate with Upper Case San Serif words made of white acrylic non glare cut out letters of height 15mm raised not less than 0.8mm above base plate and the equivalent word/s written in Hindi with Devnagri non glare acrylic letters of height 15mm raised not less than 0.8mm above base plate. Grade 2/ Grade 1 Braille to be integral with the sign face and be raised 0.5mm above base plate. Each signboard to be fixed as per manufacturers specifications on the wall adjoining the respective room door at a height of 1200mm from FFL and as per the directions by the engineer in charge.	As directed by Engineer-in-charge	Number	1633	490
1899	PWD persons	51.88	BDM	Providing and fixing in place 300mm x 300mm x 3mm polyurethane stick on tactile directional tiles and warning tiles having beveled edges and of the approved brand, make and colour and conforming to ISO 23599: 2012 inside the building on all floors in corridors, lobbies, level differences as per accessibility standards and to be installed as per the installation instructions given by the manufacturer using butyl rubber adhesive and the hardware specified by the manufacturer, as per the direction of the engineer in charge complete.	As directed by Engineer-in-charge	Number	3545	1064
1900	PWD persons	51.89		Grab bars-Providing SS grab bars set for accessible toilets comprising of 4 nos. Grab bars as specified below. (1 nos. wing grab bar + 1 nos. L shaped grab bar + 2 nos. straight grab bars = 1 typical set) 27a) Swing grab bar (1 NOS) Providing a S.S. 304 SWING HANDICAP GRAB BAR - 700 mm and of DIA: 32MM and thickness 1.5mm of the roved brand and make. 27b) L Shaped grab bar (1 NOS) Providing S.S. 304 L SHAPED DISABLED GRAB BAR of IZE-600MM (H) X 600MM (D) and 32MM DIA. and thickness mm of the approved brand and make. 27c) Straight grab bar (2 NOS) Providing S.STEEL 304 GRAB RAIL (600 MM), 32MM DIA. and thickness 1.5mm of the approved brand and make.	As directed by Engineer-in-charge	Number	19500	5850

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1901	PWD persons	51.90		Providing and Fixing Accessible Wayfinding and navigation signage systems - Providing and fixing in location as directed by Engineer in Charge, accessible modular wayfinding and navigational signage system comprising of ADA and Harmonised Guidelines compliant signage and wayfinding elements, in multilingual, tactile and braille format. Signage systems to be designed for entire building / complex under consideration	As directed by Engineer-in-charge	Number	85640	25692
1902	Doors and Windows	51.91	BDT	Providing & fixing factory-made steel door of Single leaf External Embossed Wood finish type with a.) frame of size 100x58 mm conforming to IS : 4351-2003 , 1.2 mm thick pre galvanized sheet with mitred and welded cones , frame stretches, hinge reinforcing plates , fixing plates and hardware mounting plates and Polyurethane foam infill b.) Shutter of thickness 46mm made of 0.8 mm thick slip coated pre galvanized steel sheet on both sides conforming to ASTM A527/ASTM A525, BS 2989 1994, IS 277 , Zinc coating 120 GSM . Lock formed panels with internal stiffeners of 3mm thick made of galvanized sheet, 3 mm thick hinge reinforcing hardware mounting plates and lock protection with Honey-comb craft paper infill of thickness 150 GSM of load bearing capacity 500 Kilogram/Square Metre. c.) Finish: Powder coated surface finished with thermosetting polyurethane paint of Aliphatic grade of thickness 60-micron d.) Accessories: Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges of Dorset make, Dorset Mortise lock, SS Tower bolt of 200 mm size, Eye hole, Door stopper complete.	As directed by Engineer-in-charge	Square Metre	6368	263
1903	Doors and Windows	51.92	BDT	Providing & fixing factory-made steel door of Single leaf External Plain Wood finish type with a.) frame of size 100x58 mm conforming to IS : 4351-2003 , 1.2 mm thick pre galvanized sheet with mitred and welded cones , frame stretches, hinge reinforcing plates , fixing plates and hardware mounting plates and Polyurethane foam infill b.) Shutter of thickness 46mm made of 0.8 mm thick slip coated pre galvanized steel sheet on both sides conforming to ASTM A527/ASTM A525, BS 2989 1994, IS 277 , Zinc coating 120 GSM . Lock formed panels with internal stiffeners of 3mm thick made of galvanized sheet, 3 mm thick hinge reinforcing hardware mounting plates and lock protection with Honey-comb craft paper infill of thickness 150 GSM of load bearing capacity 500 Kilogram/Square Metre. c.) Finish: Powder coated surface finished with thermosetting polyurethane paint of Aliphatic grade of thickness 60-micron d.) Accessories: Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges of Dorset make, Dorset Mortise lock, SS Tower bolt of 200 mm size, Eye hole, Door stopper complete. Sizes up to 1200 x2439 mm	As directed by Engineer-in-charge	Square Metre	6080	263

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1904	Doors and Windows	51.93	BDT	Providing & fixing factory-made steel door of Single leaf External Plain Wood finish type with a.) frame of size 100x58 mm conforming to IS : 4351-2003 , 1.2 mm thick pre galvanized sheet with mitred and welded cones , frame stretches, hinge reinforcing plates , fixing plates and hardware mounting plates and Polyurethane foam infill b.) Shutter of thickness 46mm made of 0.8 mm thick slip coated pre galvanized steel sheet on both sides conforming to ASTM A527/ASTM A525, BS 2989 1994, IS 277 , Zinc coating 120 GSM . Lock formed panels with internal stiffeners of 3mm thick made of galvanized sheet, 3 mm thick hinge reinforcing hardware mounting plates and lock protection with Honey-comb craft paper infill of thickness 150 GSM of load bearing capacity 500 Kilogram/Square Metre. c.) Finish: Powder coated surface finished with thermosetting polyurethane paint of Aliphatic grade of thickness 60-micron d.) Accessories: Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges of Dorset make, Dorset Mortise lock, SS Tower bolt of 200 mm size, Eye hole, Door stopper complete. Sizes up to 1200 x2439 mm	As directed by Engineer-in-charge	Square Metre	5790	263
1905	Doors and Windows	51.94	BDT	Providing & fixing factory-made steel door of Single leaf Internal Plain Wood finish type with a.) frame of size 100x58 mm conforming to IS : 4351-2003 , 1.2 mm thick pre galvanized sheet with mitred and welded cones , frame stretches, hinge reinforcing plates , fixing plates and hardware mounting plates and Polyurethane foam infill b.) Shutter of thickness 46mm made of 0.8 mm thick slip coated pre galvanized steel sheet on both sides conforming to ASTM A527/ASTM A525, BS 2989 1994, IS 277 , Zinc coating 120 GSM . Lock formed panels with internal stiffeners of 3mm thick made of galvanized sheet, 3 mm thick hinge reinforcing hardware mounting plates and lock protection with Honey-comb craft paper infill of thickness 150 GSM of load bearing capacity 500 Kilogram/Square Metre. c.) Finish: Powder coated surface finished with thermosetting polyurethane paint of Aliphatic grade of thickness 60-micron d.) Accessories: Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges of Dorset make, Dorset cylindrical lock, SS Tower bolt of 200 mm size, Door stopper complete.	As directed by Engineer-in-charge	Square Metre	5509	263

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1906	Doors and Windows	51.95	BDT	Providing & fixing factory-made steel door of Single leaf Internal Plain Steel finish type with a.) frame of size 100x58 mm conforming to IS : 4351-2003 , 1.2 mm thick pre galvanized sheet with mitred and welded cones , frame stretches, hinge reinforcing plates , fixing plates and hardware mounting plates and Polyurethane foam infill b.) Shutter of thickness 46mm made of 0.8 mm thick slip coated pre galvanized steel sheet on both sides conforming to ASTM A527/ASTM A525, BS 2989 1994, IS 277 , Zinc coating 120 GSM . Lock formed panels with internal stiffeners of 3mm thick made of galvanized sheet, 3 mm thick hinge reinforcing hardware mounting plates and lock protection with Honey-comb craft paper infill of thickness 150 GSM of load bearing capacity 500 Kilogram/Square Metre. c.) Finish: Powder coated surface finished with thermosetting polyurethane paint of Aliphatic grade of thickness 60-micron d.) Accessories: Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges of Dorset make, Dorset cylindrical lock, SS Tower bolt of 200 mm size, Door stopper complete.	As directed by Engineer-in-charge	Square Metre	5211	263
1907	Doors and Windows	51.96	BDT	Providing & fixing factory-made Single leaf 2 hour fire rated door as per IS 3614 Part 2 & BS 476 Part 20 & 22, tested to UL 10 C and conforming to NFPA 80 , tested at NTL /CBRI/ARAI of Plain Steel finish type with a.) Frame of size 143x58 mm and thickness of 1.6 mm thick skin pass galvanized iron sheet (Conform to IS 277) formed to single or double rebate profile b.) Shutter of 46 mm thickness and constructed from 1.2 mm thick skin pas galvanized iron sheet (Conform to IS 277) infill Rockwool / Mineral wool/ Honey comb craft paper c.) Vision glass of 5mm thick clear/wired glass Circular or Rectangular d.) Finish : Primed with zinc phosphate stoving primer and finished with Polyurethane aliphatic grade or epoxy paint as required of thickness 60 micron e.) Accessories : Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges, Mortise sash lock with lever handle, Mortise dead bolt , Mortise latch , Door closer and Flush bolts complete.	As directed by Engineer-in-charge	Square Metre	7236	263

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1908	Doors and Windows	51.97	BDT	Providing & fixing factory-made Single leaf 2 hour fire rated door as per IS 3614 Part 2 & BS 476 Part 20 & 22, tested to UL 10 C and conforming to NFPA 80 , tested at NTL /CBRI/ARAI of Plain Steel finish type with a.) Frame of size 143x58 mm and thickness of 1.6 mm thick skin pass galvanized iron sheet (Conform to IS 277) formed to single or double rebate profile b.) Shutter of 46 mm thickness and constructed from 1.2 mm thick skin pas galvanized iron sheet (Conform to IS 277) infill Rockwool / Mineral wool/ Honey comb craft paper c.) Vision glass of 5mm thick clear/wired glass Circular or Rectangular d.) Finish : Primed with zinc phosphate stoving primer and finished with Polyurethane aliphatic grade or epoxy paint as required of thickness 60 micron e.) Accessories : Min 8 Anchor fastener of HILTI make, min 3 SS Ball Bearing Butt Hinges, Mortise sash lock with lever handle, Mortise dead bolt , Mortise latch , Door closer , Panic bar and external trim lock and Flush bolts complete.	As directed by Engineer-in-charge	Square Metre	8686	263
1909	Doors and Windows	51.98	BDT	Providing & fixing factory-made Aluminum windows of aluminum alloy HE 9WP (6063 T5/T6), powder coating of jotun/AkzoNobel of 60 micron thickness a.) Glass: 5mm thick clear float of Saint Gobain / Asahi make b.) Mesh of SS Type 304 grade of .22 mm thickness c.) Accessories: EPDM (Ethylene Propylene Diene Monomer) Gasket , SS Screws , Aluminum cleats , Roller , Push handle , Fly mesh handle , Anti lifter , U guide glass and mesh shutter complete	As directed by Engineer-in-charge	Square Metre	5471	385
1910	Doors and Windows	51.99	BDT	Providing & fixing factory-made steel windows constructed of Skin Pass Galvanized Iron Sheet (as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr& thickness of 0.6 mm) with a.) Window Shutter of .6mm thick skin pass Galvanized Iron Sheet b.) Window Frames of .8m thick skin pass Galvanized Iron sheet of size 80mm X 45mm c.) Mullion : of 0.8mmthick skin pass Galvanized Iron sheet of size 80mm X 60mm d.) Vision Glass of 4mm clear float glass in rectangular shape. e.) Finish : Coated with Zinc Phosphate Primer or Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability f.) MS Grill of 10 mm square MS bright bars g.) Accessories : SS Pin type Hinges — 1 Set; Polypropylene , Handle — 1, Friction Stay Powder Coated – 1, MS powder coated Tower bolt — 2 (Ethyl Propylene Diamine Monomer (EPDM) Should be used all around glass in shutter for fixing of glass); corner brackets — 4 (made of Polypropylene each per shutter and frame) complete	As directed by Engineer-in-charge	Square Metre	6383	385

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1911	Doors	51.100		Providing, supplying, fabricating and fixing panel of aluminium composite panel cladding in approved shape made out of 4 mm thick ACP sheet material consisting of 3mm thick FR grade mineral core following NBC part IV Fire and life safety (having 2 hours fire resistance in accordance to ASTM E119-12 and BS476 part 6 and 7 class O) sandwiched between two aluminium sheets (each 0.5 mm thick of AA 5005/AA3105 grade) The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluoropolymer resin (having 70:30 ratio of PVDF and acrylic) coating of approved colour and sg=hade on top face and polymer (service) coating of bottom face as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicon sealant, backer rods etc .overall weight of the ACP shall not be less than 7.5 Kilogram/Square Metre)	As directed by Engineer-in-charge	Square Metre	3870	1150
1912	Plastering and Pointing	51.101	BDL	Providing internal cement plaster 25 mm thick in single coat using Ready to use wall plaster in cement mortar 1:4 to concrete, brick, stone surfaces in all positions including scaffolding and curing. Providing groove at joint of B.B. Masonry and concrete members complete. With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	495	177
1913	Plastering and Pointing	51.102	BDL	Providing internal cement plaster 20mm thick in a single coat using Ready to use wall plaster to concrete, brick surfaces in all positions including scaffolding and curing. Providing groove at joint of B.B.Masonry and concrete members complete. a) cement ratio 1:5 With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	405	162
1914	Plastering and Pointing	51.103	BDL	Providing internal cement plaster 20mm thick in a single coat using Ready to use wall plaster to concrete, brick surfaces in all positions including scaffolding and curing. Providing groove at joint of B.B.Masonry and concrete members complete. b) cement mortar 1:4 With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	417	162
1915	Plastering and Pointing	51.104	BDL	Providing internal cement plaster 20mm thick in a single coat using Ready to use wall plaster to concrete, brick surfaces in all positions including scaffolding and curing. Providing groove at joint of B.B.Masonry and concrete members complete C) cement mortar 1:3 With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	429	162
1916	Plastering and Pointing	51.105	BDL	Providing internal cement plaster 20mm thick in a single coat using Ready to use wall plaster in cement mortar 1:3 to stone masonry surfaces in all positions including scaffolding and curing. Providing groove at joint of stone masonry and concrete members complete. With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	429	162

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1917	Plastering and Pointing	51.106	BDL	Providing internal cement plaster 12 mm thick in a single coat using Ready to use wall plaster to concrete or brick surface in all positions including scaffolding and curing complete. Providing groove at joint of B.B. Masonry and concrete members complete. a) cement ratio 1:5 With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	213	80
1918	Plastering and Pointing	51.107	BDL	Providing internal cement plaster 12 mm thick in a single coat using Ready to use wall plaster to concrete or brick surface in all positions including scaffolding and curing complete. Providing groove at joint of B.B. Masonry and concrete members complete. b) cement ratio 1:4 With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	225	80
1919	Plastering and Pointing	51.108	BDL	Providing internal cement plaster 12 mm thick in a single coat using Ready to use wall plaster to concrete or brick surface in all positions including scaffolding and curing complete. Providing groove at joint of B.B. Masonry and concrete members complete. c) cement ratio 1:3 With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	228	80
1920	Plastering and Pointing	51.109	BDL	Providing internal cement plaster 6 mm thick in a single coat using Ready to use wall plaster in cement mortar 1:3 to concrete surface in all positions including scaffolding and curing. Providing groove at joint of B.B. Masonry and concrete members complete. With Prior Approval of Concerned S.E.	As directed by engineer in charge	Square Meter	173	55
1921	Brick Masonary	51.110	BDG	Providing Autoclaved areated concrete block masonry of approved manufacture confirming to IS 2185 Part III 1984 of size 600 mm x 200mm and thickness 100,150, 200 or 250 mm using Ready to use BLOCK JOINT MORTAR1:6 in foundations and plinth of inner walls / external walls including bailing out water, striking joints on unexposed faces, racking out joints on exposed faces and watering complete.. With Prior Approval of Concerned S.E.	As directed by engineer in charge	Cubic Meter	6056	1216
1922	Iron Work	51.111	BDW	Providing and fixing 50mm diameter and 1.5 mm thick Stainless steel hand railing in S.S.304 Grade including fabricating ,fixtures, erecting, necessary welding, grinding, finishing, buffing to stainless steel pipe etc. complete	As directed by Engineer Incharge	Running Metre	3250	1399

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1923	water supply and sanitary	51.112	BDW	Providing and installing bio digester unit based on DRDO technology made of fibre reinforced plastic (FRP) having composition and following technical specifications and including necessary pipe and accessories up to 3 meter length, excluding the necessary excavation for installing the bio digester. Percentage of fibre glass (glass content in fibre glass should be minimum 30%): -33.33% Percentage of polyester resin: - 66.67% Water absorption (as per ASTM):-0.30% Flammability as per ASTM Tensile strength:-115 MPA Specific Gravity at 25 degree centigrade 1.45 Izod impact strength:-65KJ/M2 Heat defection/distort temperature:-65deg C Corrosion resistance (Non Corrosive) fitted with Inlet pipe size rigid PVC: -100mm Outlet pipe size rigid PVC:-80mm Gas outlet rigid PVC with Valve: 20mm Bacteria immobilization PVC mattes (on all partition) With DRDO TOT licensee and latest batch certificate(month & year of supply) and capacity as below				
1924		a		a) Up to 10 user size (1.0mx1.0mx0.70m), Capacity of biodigester:-700 liters, Area of top, bottom and side walls: - 4.80 sq.m, Area of partition walls: 1.40sq.m, Total weight of FRP: - 33.48 Kilogram, Bacteria inoculums quantity: - 200 liters , Minimum thickness of side walls / top and bottom: 3mm, Number of inside partitions: - 3, Minimum thickness of partition wall: 3mm.	As directed by Engineer Incharge	Number	40565	4000
1925		b		b) Up to 15 user size (1.0mx1.0mx1.0m), Capacity of biodigester:-1000 liters, Area of top, bottom and side walls: - 6 sq.m, Area of partition walls: 2 sq.m, Total weight of frp: - 54 Kilogram, Bacteria inoculums quantity: - 400 liters, Minimum thickness of side walls / top and bottom: 4mm, Number of inside partitions: - 3, Minimum thickness of partition wall: 3mm	As directed by Engineer Incharge	Number	68345	6800
1926		c		c) Up to 25 user size (1.5mx1.0mx1.0m), Capacity of biodigester:-1500 liters, Area of top, bottom and side walls:- 8 sq.m, Area of partition walls: 2 sq.m, Total weight of frp: - 82.80 Kilogram, Bacteria inoculums quantity: - 600 liters, Minimum thickness of side walls / top and bottom: 5mm, Number of inside partitions: - 3, Minimum thickness of partition wall: 3mm	As directed by Engineer Incharge	Number	93175	9300

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1927		d		d) Up to 40 user size (2.0mx1.0mx1.0m), Capacity of biodigester:-2000 liters, Area of top, bottom and side walls: - 10 sq.m, Area of partition walls: 3 sq.m, Total weight of frp: - 106.20 Kilogram, Bacteria inoculums quantity: - 600 liters, Minimum thickness of side walls / top and bottom: 5mm, Number of inside partitions: - 3, Minimum thickness of partition wall: 3mm	As directed by Engineer Incharge	Number	123978	12000
1928		e		e) Up to 60 user size (2.4mx1.25mx1m), Capacity of Biodigester:-3000 liters, Area of top, bottom and side walls: - 13.30 sq.m, Area of partition walls: 3.75sq.m, Total weight of FRP: - 139.95 Kilogram, Bacteria inoculums quantity: - 1000 liters, Minimum thickness of side walls / top and bottom: 5mm, Number of inside partitions: - 3, Minimum thickness of partition wall: 3mm	As directed by Engineer Incharge	Number	163261	16000
1929		f		f) Up to 80 user size (2.7mx1.5mx1m), Capacity of Biodigester:-4000 liters, Area of top, bottom and side walls: - 16.50 sq.m, Area of partition walls: 4.50sq.m, Total weight of FRP: - 202.50 Kilogram, Bacteria inoculums quantity: - 1400 liters, Minimum thickness of side walls / top and bottom: 6mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 3mm	As directed by Engineer Incharge	Number	236232	23000
1930		g		g) Up to 100 user size (2.5mx2mx1m), Capacity of Biodigester:-5000 liters, Area of top, bottom and side walls: - 19.00 sq.m, Area of partition walls: 8.00sq.m, Total weight of FRP: - 248.40 Kilogram, Bacteria inoculums quantity: - 1800 liters, Minimum thickness of side walls / top and bottom: 6mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 3mm	As directed by Engineer Incharge	Number	290862	29000
1931		h		h) Up to 150 user size (3.2mx2.0mx1.25m), Capacity of Biodigester:-8000 liters, Area of top, bottom and side walls: - 25.80 sq.m, Area of partition walls: 10.00sq.m, Total weight of FRP: - 397.08 Kilogram, Bacteria inoculums quantity: - 3200 liters, Minimum thickness of side walls / top and bottom: 7mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 4mm	As directed by Engineer Incharge	Number	466876	46000
1932		i		i) Up to 200 user size (4mx2.0mx1.25m), Capacity of Biodigester:-10000 liters, Area of top, bottom and side walls: - 31.00 sq.m, Area of partition walls: 10.00sq.m, Total weight of FRP: - 462.60 Kilogram, Bacteria inoculums quantity: - 3400 liters, Minimum thickness of side walls / top and bottom: 7mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 4mm	As directed by Engineer Incharge	Number	549936	54000
1933		j		j) Up to 300 user size (4.8mx2.0mx1.25m), Capacity of Biodigester:-12000 liters, Area of top, bottom and side walls: - 36.20 sq.m, Area of partition walls: 10.00sq.m, Total weight of FRP: - 593.28 Kilogram, Bacteria inoculums quantity: - 4200 liters, Minimum thickness of side walls / top and bottom: 8mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 4mm	As directed by Engineer Incharge	Number	689174	68000

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1934		k		k) Up to 400 user size (5mx2.0mx1.5m), Capacity of Biodigester:-15000 liters, Area of top, bottom and side walls: - 41.00 sq.m, Area of partition walls: 12.00sq.m, Total weight of FRP: - 678.80 Kilogram, Bacteria inoculums quantity: - 5200 liters, Minimum thickness of side walls / top and bottom: 8mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 4mm	As directed by Engineer Incharge	Number	800153	80000
1935		l		l) Up to 500 user size (6mx2.0mx1.6m), Capacity of Biodigester:-20000 liters, Area of top, bottom and side walls: - 50.72 sq.m, Area of partition walls: 13.36sq.m, Total weight of FRP: - 917.86 Kilogram, Bacteria inoculums quantity: - 7000 liters, Minimum thickness of side walls / top and bottom: 9 mm, Number of inside partitions: - 4, Minimum thickness of partition wall: 4mm	As directed by Engineer Incharge	Number	1081250	100000
1936	water proofing	51.113	BDJ	Providing and laying Hyperplas Aluminium or equivalent polymeric multiple monolithic five layer water proofing flexible, pliable and high tensile strength membrane (3 Kilogram/Square Metre) which is comprise of top with "V" shape embossed 40 micron Aluminium foil to bear thermal expansion and avoiding delamination & consist of centre core of 90 micron thick High Molecular High density Polyethylene film (HMHDPE) which is protected on both the side with polymeric mix. Applying the membrane by thermofusing to roof & parapet after applying thin film of hot blown bitumen 85/25 or 90/15 grade @ 1.2 Kilogram/Square Metre maximum as per surface condition or Hyperplas primer @ 250 gms/Square Metre as per site condition on the surface to be treated with 10 cm overlapping including finishing etc. complete and covering guarantee of 7 years on stamp paper of Rs. 100/- and as directed by Engineer-in-charge. (Prior permission of S.E.in writing is necessary before inclusion of this item in estimate).	As directed by Engineer Incharge	Square Metre	747	212
1937	water proofing	51.114	BDJ	Providing and laying Hyperplas standard or equivalent polymeric multiple monolithic five layer water proofing flexible, pliable and high tensile strength membrane (3 Kilogram/Square Metre) & consist of centre core of 90 micron thick High Molecular High density Polyethylene film (HMHDPE) which is protected on both the side with polymeric mix. Applying the membrane by thermofusing to roof & parapet after applying thin film of hot blown bitumen 85/25 or 90/15 grade @ 1.2 Kilogram/Square Metre maximum as per surface condition or Hyperplas primer @ 250 gms/Square Metre as per site condition on the surface to be treated with 10 cm overlapping including finishing etc. complete and covering guarantee of 7 years on stamp paper of Rs. 100/- and as directed by Engineer-in-charge. (Prior permission of S.E.in writing is necessary before inclusion of this item in estimate).	As directed by Engineer Incharge	Square Metre	604	133

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1938	water proofing	51.115	BDJ	Providing and laying mechanical protective layer over water proofing membrane with cement screed plaster 1:5 after laying chicken mesh over membrane including curing etc. complete 20 mm thick with cost of chicken mesh etc. complete and covering 7 years guarantee on court stamp paper of Rs.100/- including necessary testing specified by Engineer (Prior permission of S.E. is necessary before inclusion of this item in estimate) (Note :- This item shall be executed over item Number 5 of BD-J Water Proofing)	As directed by Engineer Incharge	Square Metre	286	120
1939	Plastering	51.116	BDL	Providing and applying a Silicon Base Water Repellent Stone Sealers, on Brick / Stone masonry / Concrete surfaces in Two coats by spraying. Including cleaning / sand blasting for removing dirt / cement mortar patches etc. by force water jet, wire brushing etc. complete.	As directed by Engineer Incharge	Square Metre	512	
1940	Plastering	51.117	BDL	Providing internal / external 12 mm thick Ready Mix plaster confirming to IS:4031(Part-4) 1988 and IS 383-1970 in a single coat using Cement mortar of proportion 1:4 containing special type of polymer additives about 0.4%, to all type of surfaces in all positions including scaffolding and curing complete.	As directed by Engineer Incharge	Square Metre	214	
1941	Plastering	51.118	BDL	Providing internal / external 20 mm thick Ready Mix plaster confirming to IS:4031(Part-4) 1988 and IS 383-1970 in a single coat using Cement mortar of proportion 1:4 containing special type of polymer additives about 0.4%, to all type of surfaces in all positions including scaffolding and curing complete	As directed by Engineer Incharge	Square Metre	378	
1942	Brick Masonary	51.119	BGG	Providing brick masonry with interlock "Fourlock" bricks in retaining walls ,diaphragm wall ,compound wall ,plinth & partition wall etc of specified 150 mm thick including construction with interlock "Fourlock" brick, filling the hollow spaces with cementious grout material of proportion of C:M 1:6 using trap stone grit metal/artificial sand dusting off the finished brick masonry"Fourlock" bricks, surface,watering & curing etc complete. (Including steel reinforcement of 8mm bar as strengthening bar in hollow spaces of fourlock bricks with cementious greet material)	As directed by Engineer Incharge	Square Metre	1273	
1943	Brick Masonary	51.120	BGG	Providing brick masonry with interlock "Fourlock" bricks in plinth & superstructure of specified 150 mm thick including construction with interlock "Fourlock" bricks,filling the hollow spaces with cementious grout material of proportion of C:M 1:6 using trap stone grit metal/artificial sand including dusting off the finished brick masonry surface,watering & curing etc complete. (Excluding steel reinforcecement for strengthening)	As directed by Engineer Incharge	Square Metre	1099	

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1944	Brick Masonary	51.121	BGG	Providing brick masonry with interlock "Fourlock" bricks in retaining walls ,diaphragm wall ,compound wall ,plinth & partition wall etc of specified 100 mm thick including construction with interlock "Fourlock" brick, filling the hollow spaces with cementious grout material of proportion of C:M 1:6 using trap stone grit metal/artificial sand dusting off the finished brick masonry"Fourlock" bricks, surface,watering & curing etc complete. (Including steel reinforcement of 8mm bar as strengthening bar in hollow spaces of fourlock bricks with cementious greet material)	As directed by Engineer Incharge	Square Metre	1085	
1945	Brick Masonary	51.122	BGG	Providing brick masonry with interlock "Fourlock" bricks in plinth & superstructure of specified 100 mm thick including construction with interlock "Fourlock" bricks,filling the hollow spaces with cementious grout material of proportion of C:M 1:6 using trap stone grit metal/artificial sand including dusting off the finished brick masonry surface,watering & curing etc complete. (Excluding steel reinforcecement for strengthening)	As directed by Engineer Incharge	Square Metre	903	

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
ROAD WORKS								
1946	Rigid Pavement (New item)	51.123	RD	Construction of M-40 grade reinforced prestressed precast concrete panel of 200 mm thickness having size 4.5m x 3.5m or as per drawing, casting the panels as per approved	As directed by Engineer in	Cubic Metre	11385	---
1947	Road Furniture	51.124	RD	Providing and laying of Plastirib T or equivalent raised profile edge line marking (audible vibratory) with special hot applied thermoplastic road marking compound according to IRC 35 : 2015, Clause 7.7 with 2 mm thick base coat layer above that ribs profile size of length 40 mm x width 140 mm x height 6mm thick (Total 8 mm thick) at the distance of 250 mm between two ribs including reflectorizing glass beads @ 250 gm / sq. mtr. area. The minimum and maximum width of raised profile should be 150 mm. The thickness of 8 mm profil should be exclusive of surface applied glass beads. The finished surface to be exclusive of surface applied glass beads. The finished surface to be levelled, uniform and free from streaks and holes, to be applied on edge lines.	As directed by Engineer in charge	Square Metre	1009	27
1948	Road Furniture	51.125	RD	Providing and laying of Plastirib 2K or equivalent raised profile edge line marking (audible vibratory) with special 2 component cold applied road marking compound according to IRC 35 : 2015, Clause 7.7 with 2 mm thick base coat layer above that ribs profile size of length 40 mm x width 140 mm x height 6mm thick (Total 8 mm thick) at the distance of 500 mm between two ribs including reflectorizing glass beads @ 250 gm / sq. mtr. area. The minimum and maximum width of raised profile should be 150 mm. The thickness of 8 mm profil should be exclusive of surface applied glass beads. The finished surface to be exclusive of surface applied glass beads. The finished surface to be levelled, uniform and free from streaks and holes, to be applied on edge lines.	As directed by Engineer in charge	Square Metre	2629	27
1949	Road Furniture	51.126 a	RD	Providing and Laying of Rumble strips with Plastirib 2K, or equivalent 2 component cold plastic profiled material to give total width of 500 mm and height of 10 mm. Ramp provided to give width of 145 mm, width of ribs to be 55mm laid at centre to centre distance of 35 mm, with reflective glass beads @ 350 gm / Square Metre. The finished surface to be levelled, uniform and free from streaks and holes, to be applied on the edge lines, including surface cleaning and cost of all materials etc. complete.	As directed by Engineer in charge	Square Metre	3706	27

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1950	Road Furniture	51.126 b	RD	Providing and Laying of 2 or more sets (6 Nos. each set) Dual Ribs Pattern Rumble Markings on roads with vehicular speeds of more than 50 Km/hr laid as per the spacing recommended for each set under Table 11.1 and Fig. 11.2 of IRC 35:2015 using Plastirib 2K, or equivalent 2 component cold plastic profiled material. Each Dual Rib pattern rumble marking shall have width of 500 mm. Each dual rib pattern rumble marking shall have 2 ribs each of Width of 100 mm and height 20 mm. Gap between two ribs shall be 300 mm. Each rumble marking shall be made complete with drop on Soild Plus reflective glass beads @ 300 gm / Square Metre spread throughout the surface of marking. The finished surface to be levelled, uniform and free from streaks and holes, including surface cleaning and cost of all materials etc. complete.	As directed by Engineer in charge	Square Metre	4333	44
1951	Road Furniture	51.127	RD	Supplying and fixing of Plastic body studs with two shanks and without shanks of SWAREFLEX or equivalent in yellow, red and white color made of ABS body with size 100*100*17.9 mm, having reflective panels of 34 special Swaro glass reflective elements embedded in plastic and 19 degrees tilted to provide the highest reflectivity. Having reflective panels in yellow, red and white plastic with yellow, red, white or green Swaro glass elements. The studs shall have a compressive strength test certificate of 25 tons in accordance with ASTDM D 4280 and successfully passing retro reflectivity test as per EN 1463-1 and the road test EN 1463-2 from a reputed laboratory. The fixing of the road studs shall be done by using a recommended Two Component Epoxy. In addition two holes should be drilled in the depth of 50 mm on the road for the version with two shanks.	As directed by Engineer in charge	Number	477	27
1952	Road Furniture	51.128	RD	Supplying and fixing of Swareflex or equivalent Metal Road studs with shank, made of Die-cast Aluminum alloy molded body with the size of 100*100*19.8 mm, shank size 50mm, having reflective panels of 34 glass reflective elements embedded in plastic and 19 degrees tilted to provide the highest reflectivity having reflective panels in yellow, red and white plastic with yellow, red, white or green glass elements. The weight of Aluminum stud should be not less than 370 grams. The studs shall have a compressive strength test certificate of 40 tons in accordance with ASTDM D 4280-04 and successfully passing retro reflectivity test as per EN 1463 part 1 & part 2, from a reputed international laboratory . The bidder shall attach a product warranty certificate against Breakage and loss of reflectivity from the manufacturer for 3 years from installation. The fixing of road studs shall be done by using a recommended Two Component Epoxy after drilling 60 mm hole on the road for the shank to go inside.	As directed by Engineer in charge	Number	562	27

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1953	Road Furniture	51.129	RD	Supplying and fixing of Plastic body of Swaro Warn or equivalent 184*81*60 mm, mounted on road side plastic guide posts at a height of 80cm to 100cm from the ground level and fixed on post with screws supplied with the Swaro warn product. Swaro Warn comes in white or blue color. Visual wildlife warning system deflecting the headlights of approaching vehicle towards Road side at Dusk or night for creating a visual warning fence for the wildlife to avoid the accidents of wild life. Confirming standards RVS 04.03.12. The Swaro Warn article 7178 can be used for all types of terrain.	As directed by Engineer in charge	Number	3446	27
1954	Road Sub Grade	51.130	RD	Soil Stabilisation-Stabilization of in-situ (existing pavement crust) or soil or otherwise sub-base course upto the required depth by cold in-situ recycling using chemical additives/otherwise: Providing pulverizing,spreading,milling and mixing of chemical additives at the rate of minimum 750 ml/cum require quantity as per job mix design in accordance with IRC37-2012.Cementitious additive @ rate of minimum 4% should be spread on the existing pavement using a mobile truck mounted containerized cement/additive spreader with microprocessor controlled weighing and spreading system.The additive spreader shall have variable working width sufficient to cover whole pavement lane.The in-situ stabilization process shall be carried out by a mobile and self propelled stabilizer / reclaimer of working width of 2.4 mt and with minimum engine horse power of 440 kw with a variable working depth of minimum 50 cm.The resultant stabilised mix then would be profiled to the required grade ,level and thickness using motor grader and the mix would be compacted using 20 tonne pad foot roller in combination with smooth whell roller to achieve desired proctor density as per IRC37-2012 and complete in all respects and curing with water as required including all materials ,labor and machinery etc. The entire In-situ process would be carried out in single pass with milling and pulverzing of damaged asphalt pavement/soil/agggregates/soil-aggregate mixture to the desired depth and with simultaneous	As directed by Engineer in charge	Cubic Metre	3495	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1955	Road Maintainance	51.131	RD	Rehabilitation of existing damaged asphalt pavement by, cold, in-situ, recycling process, using foam bitumen as binder and cement as filler, as per IRC 120 2015 / IRC 37 2012. A layer of 20 mm fresh aggregates to a thickness of 30 mm, or, as per design mix, would be pre-spread evenly, on the existing surface using paver / motor grader. 1.00% cement by weight of mix shall be pre-spread on the layer of fresh aggregates using truck mounted cement spreader with computer-controlled spreader system of width 2.40 meters. The freshly laid aggregates, spreaded cement, and, a layer of existing damaged pavement shall be then pulverised and recycled in-situ by injecting 2% bitumen (VG30) as foam-bitumen to design depth using self-propelled 4 wheeled, cold recycler machine with working width of 2.4 m fitted with 440 KW engine. The machine shall have in-built bitumen heating unit and duel spray bar, for foaming the heated bitumen (VG30) and water spray bar. The built-in nozzles shall evenly spray both, foamed bitumen and water during the milling process. The resultant mix would then compact to required density by heavy roller, profiled by grader and further compacted by smooth roller and PTR. (This cold recycled surface shall be then covered with tack coat and bituminous concrete of 50mm thickness, cost of both to be accounted separately)	As directed by Engineer in charge	Running Metre	6396	---
1956	Road Safety	51.132	RD	Providing and erecting a Road Restraint system - Roller System Barrier ETI Roller System H1 & H2 comprising of post of hot dip galvanized steel of 139.8mm diameter (L-2200 and L-750) thickness 4.5 mm spaced with interval of 1 meter installed in to hardened road . Safety frame rail from sheet of 3.20mm thick are fixed to main posts, shock absorbing rollers 345 mm diameter and 480mm height made of polypropylene - EVA , post caps, locker , pipes and connection material. Distance between main post and short post shall be 500 mm. the height of upper edge rail is 960 mm. All steel parts(FRAME s235R equivalent SS400) and post S235JR shall be hot dip galvanised to protect against corrosion. The system shall be installed in accordance with the drawings and assembly instructions. etc. complete.	As directed by Engineer in charge	Running Metre	73618	---
1957	Road Surfacing Course	51.133	MORTH Section-515	Providing and laying Stone Matrix Asphalt with 100-120 TPH batch type hot mix plant producing an average output of 75 tonne per hour using crushed aggregate of specified grading premixed with bituminous binder @ 5.80 minimum percent of mix and filler, transporting the hot mix towards site, laying with hydrostatic paver finisher with sensor control to required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause Number515 etch. complete in all respects, IRC SP 79	MORTH Section-515	Cubic Metre	9283	---

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1958	Road Maintainance	51.134	RD	Milling of existing bituminous surface to specified depth of bituminous layer including disposal of removed material with all lift and lead upto 1000 m etc complete. Using machine like Writgen (W100) or equivalent	As directed by Engineer in charge	Square Metre	40.70	---
1959	Road Maintainance	51.135	RD	Providing and applying low viscosity bitumen emulsion RS1 for sealing cracks less than 3 mm wide or incipient fretting or disintegration in an existing bituminous surfacing.	As directed by Engineer in charge	Square Metre	29	---
1960	Road Surfacing Course	51.136	MORTH Section-514	Providing and laying Microsurfacing course comprising of dry (A) fine aggregates confirming to Type III grading @12 Kilogram/Square Metre. of Road Surface coverage of specification as per IRC SP 81, 2008 Polymer / latest modified cationic quick setting bitumen emulsion having 60% binder content and 3.6% polymer (B) @ 12.5% by weight of fine aggregate ordinary portland cement (C) @ 2% by weight of aggregate chemical additives (D) @1.5% by weight of fine aggregate and water as per requirement.	MORTH Section-514	Square Metre	173.00	---
1961	Road Maintainance	51.137	RD	Providing and laying a Stress Absorbing Membrane Interlayer (SAMI) / bitumen impregnated geotextile layer after cleaning the road surface, geotextile conforming to requirements of clause 703.3, laid over a tack coat with 1.05Kilogramper Square Metre of paving grade bitumen 80 - 100 penetration / emulsion as per requirement and as directed by Engineer in Charge.	As directed by Engineer in charge	Square Metre	110	---
1962	Road Maintainance	51.138	RD	Pot Hole filling with Jet Patcher-Repairs to potholes 50 mm upto 100 mm by using semidense bituminous concrete in cold mix by using emulsion including making the potholes /patches in regular shape and size. Removing loose pockets, Dewatering in potholes,tack coats of 25 Kilogram/10 Sq.Mt.with RS1 emulsion etc.by use of advanced jetpatching technology machine of approved make and specification having capacity 5.50 TO 8.00 cubic meters with auxillary engine with direct drive to heavy duty blower, Rotary Positive Displacement Blower with direct drive and separate airline silencer. (Capacity – 15 PSI, Flow rate 1370/cum/hr). cleaning as directed by Engineer – in-Charge etc. complete (Emulsion @ 5% by weight of mix)	As directed by Engineer in charge	Square Metre	1634	---
1963	Road Surfacing Course	51.139 a	MORTH 511	Open Graded Premix Surfacing- Providing and Laying OGC 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates premixed with bituminous binder transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction but excluding prime / tack and Seal coat. For Bitumen of specified grade--USING Batch mix type hot mix plant with SCADA, Paver and Vibratory roller(over BT Surface) (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 511	Square Metre	128	4

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1964	Road Surfacing Course	51.139 b	MORTH 511	Open Graded Premix Surfacing- Providing and Laying OGC 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates premixed with bituminous binder transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction but excluding prime / tack and Seal coat. For Bitumen of specified grade--USING Batch mix type hot mix plant with SCADA, Paver and Vibratory roller (Over MPM Surface) (VG-30 bulk bitumen rates are considered to arrive at rates)	MORTH 511	Square Metre	132	4

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BRIDGE & CD WORKS								
1965	Bridge Maintenance	51.140	BR	Chipping of all loose and Spalling of concrete to bottom of slab, beams etc.(wherever required), cleaning of reinforcement, carrying out thorough sand blasting, application of anti-corrosive zinc rich epoxy primer to exposed reinforcement including cost of material, labour, equipment, tools, scaffolding etc. complete.	As directed by Engineer in charge	Square Metre	490	--
1966	Bridge Maintenance	51.141	BR	Providing and applying epoxy bonding agent for bonding old to new concrete for structural members prior applying the epoxy mortar to the concrete surfaces etc complete.	As directed by Engineer in charge	Square Metre	490	--
1967	Bridge Maintenance	51.142	BR	Providing and applying epoxy mortar of resin and hardner with Sillica sand upto 20 mm thickness of Sika/Fosroc/Pidilite or its equivalent including proper wire brushing etc complete as per the direction of Site-In-Charge.	As directed by Engineer in charge	Square Metre	4383	--
1968	Bridge Maintenance	51.143	BR	Charges for groove cutting of 15 mm x 15 mm deep along crack and sealing and refilling the same with epoxy mortar including cost of material, labour etc. complete	As directed by Engineer in charge	Running metre	434	--
1969	Bridge Maintenance	51.144	BR	Cleaning of rocker & roller bearing using high pressure water jet, free from rust scales, re-setting & greasing the bearings using graphite grease including cost of materials, labour etc., complete.	As directed by Engineer in charge	Per bearing	8675	--
1970	Bridge Maintenance	51.145	BR	Bearing cleaning and pier cap cleaning for the proper movement of bearing etc. complete including all tools and machineries scaffolding etc. complete as per the direction of Site in Charge.	As directed by Engineer in charge	Number	8945	--
1971	Bridge Maintenance	51.146	BR	Providing and applying "high strength, non shrink free flow grout material" i. e. micro concrete (like shrink comp or equivalent) having compressive strength as 400 Kilogram/sq.cm. including finishing the surface and curing for 07 days. Etc complete. The usage of this non shrink concrete with zero slump is to allow to occupy every free space leaving no voids, thereby producing dense concrete with proper bonding with concrete (The quoted rates to be inclusive of all materials, labours, tools & tackles, transportation, taxes etc complete) to be applied for foundation and strengthening of pier etc and as per the direction of Site-In-Charge. (The product like Ultratech/Rendroc (RGL) of FOSROC or its equivalent)	As directed by Engineer in charge	Cubic M.	65000	--
1972	Bridge Maintenance	51.147	BR	Providing applying Polymer modified cement mortar pointing to the stone massonry structure including chipping, cleaning, applying bonding agent, staggering, curing and and all tools and tacks including safety etc. complete.	As directed by Engineer in charge	Square Metre	1389	--
1973	Bridge Maintenance	51.148	BR	Grouting to the Dowel bars with epoxy of resin+hardner to ensure the proper fixing of dowel bars including all the machineries etc. complete, as per the direction of Site- In-Charge.	As directed by Engineer in charge	Number	403	--
1974	Bridge Maintenance	51.149	BR	Providing and applying waterproof coating to the concrete surface to resist entry of moisture and prevent growth of fungus etc. complete as per the direction of site in charge.	As directed by Engineer in charge	Square Metre	97	--

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1975	Bridge Maintenance	51.150	BR	Lifting of span and bearing locations by suitable hydraulic jacks connected by high pressure, rubber hoses to pump & removal of old existing bearing (Roller side only) As per Quotation	As directed by Engineer in charge	Span	175110	--
1976	Bridge Maintenance	51.151	BR	Strengthening structural elements by providing & fixing CARBON FIBER (Make Sika or BASF or FOSROC) Surface preparation: Grinding concrete substrate, cleaning it with wire brush removing oil, laitance if present, rounding sharp edges to min 25 mm radius etc. complete. Profiling: providing & Applying compatible Mbrace primer on prepared substrate, Filling the holes and uneven surface with high strength epoxy putty etc. complete IF Required. Wrapping: Providing & Applying first coat of Saturant, cutting the carbon fiber sheet to size, wrapping the fiber sheet to structural element at desired orientation using tamping roller to avoid any air voids etc. complete. Sand pasting: Providing & Applying second coat of Saturant after min. 12 hrs, rectify air voids if any paste the rive sand on it to make surface rough to take any further finishes (Mode of measurement: Per sq.mt of Mbrace CF 400 sheet applied and not surface area of Concrete application & Quantity will be measured including wastage) The rate includes all type of material,application,equipment & scaffolding etc complete. Rate is applicable for all height & level.	As directed by Engineer in charge	Square Metre	5750	--
1977	Bridge Maintenance	51.152	BR	Replacement of existing damaged Expansion joints by providing and laying of Strip Seal Expansion Joint System, including removal of existing damaged exp joints by dismantling of deck slab, wearing coat etc. and back filling of the recess up to final finish level with conc of grade M-35, complete as per M.O.R. T&H specification.	As directed by Engineer in charge	Running metre	17890.334	--
1978	Bridge Maintenance	51.153	BR	Providing Polymer modified cement Mortar treatment after removing of existing, clading, plaster, gunite & cleaning and preparing the surface.Applying Polymer cement bond coat and Polymer modified cement Mortar as per manufacturer specification up to 50 mm thick with 8% polymer by weight of cement to fill the all cavities & making protective cover plaster including shuttering	As directed by Engineer in charge	Square Metre	5605	--
1979	Bridge Maintenance	51.154	BR	Providing, drilling and fixing Nipples for pressure injection grouting of polymer cement grout etc. complete	As directed by Engineer in charge	Number	239	--
1980	Bridge Maintenance	51.155	BR	Filling voids/honeycomb with high pressure injection grouting of Polymer Cement Grout (10% of Polymer by Weight of Cement)	As directed by Engineer in charge	Kilogram	195	--

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1981	Bridge Maintenance	51.156	BR	Providing and laying in situ / ready mix M35 grade RCC jacketing work around the existing piers of bridges etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc), height of 8 to 10 meter)	As directed by Engineer in charge	Number	8565	--
1982	Bridge cum Bhandara	51.157		A) Precast BeB Panels 1 Providing and fixing Precast M 25 grade Concrete curved section of 100 mm thick to serve as bandhara as per the standard drawing approved by department having elliptical shape with base upto 6m as per table attached to be casted in factory in suitable sections and transporting to site and erecting the same including all leads, lifts, labour and machineries with finishing .Number of elements in which completed section is proposed to be cast shall be approved.Necessary equipments for placing giving support through turn bucle or similar arrangement to maintain its verticality till insitu joining..The total steel quantity is 75Kilogram per cubic meter of concrete The method statement shall be prepared and got approved from engineer including cost of plasticizer and viscosity admixture.	As directed by Engineer in charge	Sqm	2967	
1983	Bridge cum Bhandara	51.158		b) Hot Dip Galvanised Needle Gate 1 Manufacturing with OAP & fabrication of hot dip galvanised needle gates - curved type of required size and Weight as per the detailed design and drawings with all material, Mild steel confirming to IS 2062, Rubber seal confirming to IS 4623 & Welding electrodes AWS E6013 for general weld joints. It includes all materials, Labour charges, machinery charges, 1km lead charges of transportation, loading and unloading charges of Gate parts at Site, Inspection & Quality control charges, Sand blasting,overhead charges of 10%, and all incidental charges including all duties, taxes, levies and insurance charges excluding GST	As directed by Engineer in charge	MT	166000	49800
1984	Bridge cum Bhandara	51.159		Providing and fabricating and fixing at site hot dip galavanised structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted I bolted Iwelded connections without connecting plates, braces etc. complete including all transporation , labour and all lift excluding GST	As directed by Engineer in charge	MT	110000	33000

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1985	Bridge cum Bhandara	51.160		c) FRP Needle Gate 1 Providing , supplying and fixing of FRP gates -needles in curved or straight shape in size required size and 60mm thick for the Bridge -cum- Bhandara .The gate/needles should withstand under minimum water pressure of 7.00 tonne. with interlocking arrangements, required rubber seals to arrest water leakage due to surface unevenness including FRP "C" channels at both side of gate of size 100 mm x 100 mm with 10 mm thick, with lifting eye bolts. And as per specifications mentioned in the Technical specications and product features excluding GST	As directed by Engineer in charge	Sqm	18340	5502
1986	Bridge cum Bhandara	51.161		Providing and fixing Sill beam in size 100 X100 mm with 10 mm thick, in FRP material with lifting eye bolts. And as per specifications mentioned in the Technical specications and product features excluding GST	As directed by Engineer in charge	Rmt	2500	750
1987	Cubical Toilet	51.162		Supply and installation of cubicles of width and depth as perAthena Lite- SS Series Cubicles- Std Sizes (W x D x H): 900 mm x 1550 mm x 2105 mm, (Height is including 100 mm gap from bottom, Door Width- 600 mm specifications/ site drawings). Cubicle height to be 2105 mm. Made from solid grade compact high pressure laminate as per IS:2046 and EN-438 manufactured under high specific pressure > 5 MPa and temperature >120°C, All doors will be of single colour and made of 12 mm thick Merino HPL compact panel. The doors will have chamfered edges. Each door will be supported by 3 stainless steel made hinges affixed to the pilasters. Size of panels to be as per drawing. HARDWARE & ACCESSORIES are H shaped (Top) head frame structure made of extruded Aluminium grade 6063 T5-50 micron epoxy powder coated for surface protection, Size to be 125x70x5T. Corner joinery section, Size to be 40x16.5x1.8T. U-Channel Wall joinery section,Size to be 22x16x1.6T. Door stopper section, Size to be 21x12.5x1.6T. Spring loaded Butt Hinges made from Stainless steel grade 304. Surface finish to be matt type. Covers to be lacor coated.etc complete.	As directed by Engineer-in-charge	Square Metre	11125.00	280.00

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1988	Cubical Toilet	51.163		Supply and installation of CEILING HUNG cubicles of width and depth as per specifications/ site drawings. Cubicle height to be 2400 mm. Std Sizes (W x D x H): 900 mm x 1550 mm x 2400 mm, (Height is including 100 mm gap from bottom) Door Width- 600 mmITEM DESCRIPTION Made from solid grade Merino make compact high pressure laminate as per IS:2046 and EN 438 manufactured under high specific pressure > 5 MPa and temperature >120° C, All doors will be of single colour and made of 18 mm thick Merino HPL compact panel. The doors will have chamfered edges. Each door will be supported by 3 stainless steel made hinges affixed to the pilasters. All intermediate partitions or dividers will be made of 12 mm thick Merino HPL compact laminate panels. Size of panels to be as per drawing. HARDWARE & ACCESSORIES are H shaped (Top) head frame structure made of extruded Aluminum grade 6063 T5-50 micron epoxy powder coated for surface protection. Size to be 125x70x5T. Corner joinery section, Size to be 40x16.5x1.8T. U-Channel Wall joinery section, Size to be 22x16x1.6T. Door stopper section, Size to be 21x12.5x1.6T. Spring loaded Butt Hinges made from Stainless steel grade 304. Surface finish to be matt type. Covers to be lacor coated.Coat hook with rubber stopper made from Stainless steel grade 304. Surface finish to be matt type. etc complete.	As directed by Engineer-in-charge	Square Metre	8997.00	215.00
1989	Cubical Toilet	51.164		Supply and installation of PD DOOR cubicles of width and depth as per specifications/ site drawings. PD Door height to be 1980/2100 mm.PD Doors Series : Std Sizes (W x H): 2100 mm x 7500 mm (Height is including 150 mm gap from bottom), Door Made from solid grade Merino Make compact high pressure laminate as per IS:2046 manufactured under high specific pressure > 5 MPa and temperature >120°C ,.Panel thickness 12 mm. Size of panels to be as per drawing. HARDWARE & ACCESSORIES are Specially designed D-shape wall mounted pole made from extruded grade aluminum alloy 6063/HE9/T-6 and epoxy powder coated (color as per specifications) for surface protection. Size to be 46x41x2T, Matching profile and color Nylon Polyamide-6 caps to cover aluminum Poles, Self closing Hinges (Gravity mechanism) made from Nylon Polyamide grade-6. Color to be as per specifications, Stainless steel grade 304 screws, Anti-rotation Nylon polyamide grade-6 expandable wall plugs, etc complete.	As directed by Engineer-in-charge	Square Metre	8585.00	697.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1990	Cubical Toilet	51.165		Supply and installation of TITAN 12MM BOX UP cubicles of width and depth as per specifications/ site drawings. Cubicle height to be 2100mm Titan Box up 18 mm Series Cubicles: Std Sizes (W x D x H)- 900 mm x 1550 mm x 2100 mm, (Height is including 100 mm gap from bottom) Door Size- 600 mm mm. Titan Box up 18 mm Series Cubicles: Std Sizes (W x D x H)- 900 mm x 1550 mm x 2100 mm, (Height is including 100 mm gap from bottom) Door Size- 600 mm Titan Box up 18 mm Series Cubicles: Std Sizes (W x D x H)- 900 mm x 1550 mm x 2100 mm, (Height is including 100 mm gap from bottom) Door Size- 600 mm ITEM DESCRIPTION: Made from solid grade Merino make compact high pressure laminate as per IS:2046 manufactured under high specific pressure > 5 MPa and temperature >120°C, All doors will be of single colour and made of 18 mm thick Merino HPL compact panel. All pilasters will be made of 18 mm thick Merino HPL compact panel. HARDWARE & ACCESSORIES are No head frame structure, all panels to be aliengned to the top, Corner joinery section made from Stainless steel grade 304. Surface finish to be brush type. A thin plastic film pasted for surface protection. Size to be 35mmx15mmx0.8 mm. etc complete.	As directed by Engineer-in-charge	Square Metre	8569.00	256.00
1991	Cubical Toilet	51.166		Supply and installation of TITAN STANDARD cubicles of width and depth as per specifications/ site drawings. Cubicle height will be 1980 mm Titan Std Series Cubicles: Std Sizes (W x D x H): 900 mm x 1550 mm x 1980 mm/2039 mm (Height is including 150 mm gap from bottom) Door Size- 600 mm when top rail of rectangular cross section is used and 2039 mm when top rail of circular cross section is used ITEM DESCRIPTION Made from solid grade Merino make compact high pressure laminate as per IS:2046 and EN-438 manufactured under high specific pressure > 5 MPa and temperature >120°C, All doors will be of single colour and made of 12 mm thick Merino HPL compact panel. All pilasters will be made of 12 mm thick HPL compact panel. Size of panels to be as per drawing. HARDWARE & ACCESSORIES are Top rail is made of stainless steel grade 304. There are two options for the top rail. First one comes with a rectangular cross section (Size to be 55mmx42mmx1.6 mmT) and the other one comes with circular cross section (Diameter 32 mm). Surface finish to be brush type. A thin plastic film pasted for surface protection. Corner joinery section made from Stainless steel grade 304. Surface finish to be brush type. A thin plastic film pasted for surface protection. Size to be 35mmx15mmx0.8 mm. etc complete.	As directed by Engineer-in-charge	Square Metre	8257.00	264.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1992	Cubical Toilet	51.167		Supply and installation of ZMS (Nylon) cubicles of width and depth as per specifications/ site drawings. Cubicle height will be 2003 mm. ZMS Series Cubicles: Std Sizes (W x D x H): 900 mm x 1550 mm x 2003 mm, (Height is including 150 mm gap from bottom) Door Width-600 mmITEM DESCRIPTION Made from solid grade compact high pressure laminate as per IS:2046 and EN-438 manufactured under high specific pressure > 5 MPa and temperature >120°C. All doors will be of single colour and made of 12 mm thick HPL compact panel. All pilasters will be made of 12 mm thick HPL compact panel. All intermediate partitions or dividers will be made of 12 mm thick HPL compact laminate panels. Size of panels to be as per drawing. HARDWARE & ACCESSORIES are Semi-spherical (Top) head frame structure for surface protection. Size to be 50x32x1.6T. Corner joinery section, Size to be 40x16.5x1.8T.U-Channel Wall joinery section, Size to be 22x16x1.6T.Door stopper section, Size to be 21x12.5x1.6T. Stainless steel grade 304 screws, Anti-rotation Nylon polyamide grade-6 expandable wall plugs, The Work shall complete as per drawing , under supervision of engineer in charge, etc complete.	As directed by Engineer-in-charge	Square Metre	5844.00	256.00
1993		51.168	MORTH 602	Steel Fiber Reinforcement: Supplying, Providing and Mixing Hooked End/Crimped SHAKTIMAN steel fibers with aspect ratio between 50 to 80 (Diameter between 0.45 to 01mm and length between 12.5 to 60mm) manufactured from cold drawn wire and having a minimum tensile strength of 1100N/Sq.mm, as per CE Certification label mark, HE non-glued/ HE glued, non-balling, conforming to ASTM A 820 /EN 14889-1, compatible with all construction chemicals used for the batching, laying and curing of concrete. The fibers shall be added to the concrete at specified dosage and shall be mixed with the concrete ingredients for sufficient time to ensure uniform distribution and pumping concrete. Addition of steel fibers in cement concrete for flooring/ pavement/CC roads (All ground supported slab)/underground structure/precast items (like drains, manhole covers, walls, paver blocks, pipes, tunnel segments) etc. doses as per approved designs and directions of Engineer-in-Charge. HSN Code for Steel Fibres is 73170013. Regularly used are MSCF 50; MSH 10050; MSH 7560; MSH7035; MSH 6035; MSH 5530; NSH-G 7560; MSH-G 7035; MSH-G 6035; MSH-G 5530 etc. are some of the widely used sizes.	MORTH 602.2.5 AND IRC:SP:46	KILOGRAM	112.00	--
1994	Door and Windows	51.169	BD-T	Fire Door 55mm 2HR FRL (120/120) 3 Criteria - INTEGRITY / INSULATION/ STABILITY WOODEN DOOR - Fire Door Tested in accordance to IS: 3614 Part 2.	As directed by Engineer-in-charge			

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1995				Providing of 120 min Fire rated doors system duly tested for 3 criteria - Integrity, Insulation and Stability Criteria as per the IS: 3614 Part 2 and BS: 476 part 22 at National Test House, Govt of India laborator and/or with Central Building Research Institute, Govt of India undertaking with standard heating conditions as specified in IS:3614 Part II 1992 and BS: 476 part 20 & 22 1987 to achieve the required integrity, insulation and stability (i.e. to restrict the heat radiation, temperature rise on the non fire side to the maximum of 140° C above the ambient temperature on the exposed surface of the shutter. The fire doors are tested with NCBN technology ("Non Combustible by Nature").				
1996				a) Door Frame: Supplying & Fixing frames for Fire resistant door shutters 1st class Malaysian Hardwood Frame densified (810 Kilogram/cum) and pressure treated with fire retardant chemicals in vacuum impregnation vessel under 160 psi pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141 of section 120 X 70 mm spray quoted with 2 coats of intumescent paint of minimum 200 micron, with single row of Brush- Type ASTROFLAME intumescent strip of size 10mm x 4mm affixed in the slit of the Frame for fire and smoke sealing, etc. complete.		Running metre	1718.60	423.00
1997		51.170		b)Shutter : Supplying & Fixing of 55mm thick asbestos free 'TUFWUD' brand - 3 criteria checked - fire, heat and smoke resistant composite Fire check Door Shutter complying with with fire performance - FD 120 as per IS:3614 (part - II) comprising of 2x8mm Calcium Silicate boards over Chemically treated (with Fire retardant chemicals in vaccum pressure impregnation vessels under 160 psi pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141) internal timber (Malaysian Hard Wood, densified to 810 Kilogram/cum) frame work of 100x32 mm with 32mm thick infill of ceramic fiber (density 128 Kilogram/cum), vermaculite mix faced with 3mm Fire retardant High Density fibre board, internally lipped with hardwood beading and pasted in Hydraulic Press under 25 MPa, spray quoted with 2 coats of in-tumescent paint of minimum 300 micron, and with single row of Brush- Type intumescent strip of size 10mmx4mm affixed on periphery for fire and smoke sealing in the slit on all edges of shutter except bottom, without any external lipping.		Square Metre	#REF!	2143.00
1998		51.171		<u>c) Vision Panel:</u> 2 HR rated E Class clear high stress fire rated glass is pre fabricated strategically inside the shutter structure with 10 mm inside the shutter on all sides with U- glazing. An additional insulated powdercoated 'Z' channel of 16 swg MS sheet to be fixed for reinforcement of the joints.		Square Metre	#REF!	

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
1999	Door and Windows		BD-T	Providing of 2 Hour Rated Acoustic Fire Door to effectively control noise in conference rooms, broadcasting studios, theatres and music practice rooms. duly tested for 3 criteria - Integrity, Insulation and Stability Criteria as per the IS: 3614 Part 2 and BS: 476 part 22 with standard heating conditions as specified in IS:3614 Part II 1992 and BS: 476 part 20 & 22 1987 to achieve the required integrity, insulation and stability (i.e. to restrict the heat radiation, temperature rise on the non fire side to the maximum of 140° C above the ambient temperature on the exposed surface of the shutter. The accoustic fire doors are tested with NCBN technology ("Non Combustible by Nature") duly tested for sound insulation as per ISO 10140-2 / ASTM E 90 for sound transmission loss evaluation of 42db in reverberation chamber at ARAI.	As directed by Engineer-in-charge			
2000		51.172		a)Door Frame: Providing & Fixing Frames for Fire resistant door shutters 1st class Malaysian Hardwood Frame densified and pressure treated with fire retardant chemicals in vacuum impregnation vessel under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 of section 120 X 70 mm spray quoted with 2 coats of In tumescent paint of minimum 200 micron, with 1 row of Brush- Type Astroflame® intumescent strip (imported) of size 10mmx4mm concealed in the groove of the Frame for fire and smoke sealing, etc. complete as per direction of Engineer in Charge		Running metre	#REF!	423.00
2001		51.173		b)Shutter: Supplying & Fixing of 75mm thick asbestos free, 'TUFWUD' brand - fire, heat and smoke resistant composite Acoustic Door Shutter complying with with fire performance - FD 120 as per IS:3614 (part - II) comprising of 2x12mm Calcium Silicate boards over Chemically treated (with Fire retardant chemicals in vaccum pressure impregnation vessels under 160 psi pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141) internal timber (Malaysian Hard Wood, densified to 810 Kilogram/cum) frame work of 100x36 mm with 36mm thick infill of ceramic fiber (density 128 Kilogram/cum), vermaculite mix faced with 6mm Fire retardant High Density fibre ply, internally lipped with hardwood beading and pasted in Hydraulic Press under 25 MPa, spray quoted with 2 coats of in-tumescent paint of minimum 300 micron, and with single row of Brush- Type intumescent strip of size 10mmx4mm affixed on periphery for fire and smoke sealing in the slit on all edges of shutter except bottom and placement of 3 mm thick rubber membrane, at the inside face, sandwiched between calcium silicate board & high density fire retardant ply, without any external lipping with triple rebatting in shutters, etc complete. Providing of Fire Barrier Systems to prevent the spread of fire and smoke within roof and ceiling voids.	As directed by Engineer-in-charge	Square Metre	14756.00	2143.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2002	Door and Windows	51.174	BD-T	Fire Barrier: Providing 100mm thick asbestos free composite - 3 criteria - fire, heat and smoke check Fire Barrier to prevent the spread of fire and smoke within roof and ceiling voids with flame guard of 120 minutes as per IS: 3614 part -II comprising of 4 x 12mm thick Calcium Silicate boards, Chemical treated internal timber with Fire retardant chemicals in pressure impregnation vessels under 160 PSI pressure as per IS:401and kiln seasoned to moisture below 15% as per IS:1141 frame work of 50mm x 100 mm with 50mm thick infill of ceramic fiber (density 96Kilograms/CMT), vermaculite mix reinforced by MS 8mm bars supported within the existing structure & sealed with fire retardant Poly Urethane foam. All empty spaces will be filled with ceremic wool as per instruction of the engineer.		Square Metre	10122.00	1000.00
2003	Door and Windows	51.175	BD-T	Panic Bar: (For 2 Hr fire Rated single Panic bar) Supplying, fitting & fixing Surface mounted Crash Bar/ panic Bar of touch pad style ,made of heavy duty cast iron/ steel body & latches with SS ,BHMA certified & conforming to ANSI A 156.3 for grade-1 (3 hours fire rated) and suitable for surface mounting to wooden/hollow metal/ Al framed door,with maximum operating force 8Kilogram for unlocking easily & outwardly during emergency,complete in all respect as per direction & satisfaction of Engineer-in charge including all taxes & incidental charges. (Note: To be installed at "FIRE EXIT"only under location specific instruction of Eengineer-in -Charge.)	As directed by Engineer-in-charge	Number	#REF!	#REF!
2004	Door and Windows	51.176	BD-T	Door Closure: (For 2 Hr fire Rated EN-3 Door Closure) Supplying, fitting & fixing Surface mounted overhead Door Closer for 2 hour fire rated doors of different size (e.g size -EN-3 for leaf width upto 900mm) CE certified, marked & conforming to EN - 1154 of approved quality (Internationally reputed brand like Dorma, Geze, Hafele, Assabloy & Magnum etc.) fitted and fixed Complete as per direction & satisfaction of Engineer -in Charge including all taxes & incidental charges.	As directed by Engineer-in-charge	Number	#REF!	#REF!
2005	Door and Windows	51.177	BD-T	12"SS Handle: (For 2 Hr fire Rated 12"SS Handle) Supplying, fitting & fixing Stainless Steel 'D' or 'H' type of size 300 mm x 19 mm tubular Handle with Grade 304, CE certified, marked & conforming to EN - 1154 of approved quality (Internationally reputed brand like Dorma, Geze, Hafele, Assabloy & Magnum etc.)as per direction of Eengineer -in Charge fitted and fixed complete including all taxes & incidental charges.	As directed by Engineer-in-charge	Number	1982.00	210.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2006	Road works	51.178	Rd	White topping on concrete overlay for Urban road Construction of Thin White Topping plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, replacing cement by fly ash to the extent of 15 per cent and sand by 10 per cent, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, construction and longitudinal joints with panel size of 1m X 1m, joint filler, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures, polypropylene fiber as approved, curing compound, finishing to lines and grades as per drawing	As directed by Engineer-in-charge AND IRC:SP 76-2008	Cubic Metre	5148.00	28.00
2007	Road Furniture	51.179	Rd	Standard Metal Delineator Supply and Installation of Road delienators (Road way Delienators) as per MORT&H clause 806.The structure shall be manufactured in roll forming process and shall have height not less than 800 mm above the ground, width not less than 100 mm and shall extend not more than 300mm below the ground while being installed in confirmation with IRC:79 1981or as directed by engineer in charge.The delineator shall be painted with powder coat of minimum 40 microns thickness for protection against corrosion, on top of which Type XI retro reflective sheeting shall be pasted on both sides. The delienator shall consist minimum retro reflective unit exposed area of 330 cm2 white color, full cube corner micro prismatic non-metallic retro reflective sheeting on each side conforming with IRC 67 2012 and meeting the coefficient of retro reflection values as per ASTM D 4956 Type XI table specification.The front and back faces of the delineator should be curved with a radius of not more than 200 mm and with delta angle (or central angle of curve) lying between 20o and 30o, to increase the visibility of the delineator for vehicles moving in continuous curves. The delineator shall have grooves across the length to make the reflective sheets vandal-proof.	IRC 79:1981	Number	1259.00	285.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2008	Road Furniture	51.180	Rd	Flexible Median Marker Supply and Fixing of Flexible Median Marker which shall be made of tough, high impact resistant, injection-molded, thermoplastic body with U shape structure with overall height of minimum 180mm and shank depth of minimum 30mm and thickness not less than 2mm. The exposed body structure should be cornered rounded for better aesthetics. The plastics used for the molding the flexible median marker shall have a minimum notched Izod Impact strength value of 4.11J/cm (@thickness 3.17mm) at room temperature, tested in accordance with ASTM D256. The outer part of the body shall have the Abrasion loss not less than 35 mm ³ when tested accordance with DIN53505 and DIN53516 respectively and shall retain at least 70% of this value when it is subjected to accelerated weathering for 500hrs as per the ASTM G155 standard. . The logo of the manufacturer shall be embossed on either side of the body in the injection molding process. - The flexible median marker shall have U shaped florescent yellow color retro-reflective sheeting with minimum exposed reflective area 285 mm ² . The reflective sheeting should confirm to Type XI Florescent Yellow sheeting as per IRC 67 2012 and ASTM D4956-11. The product design has to with stand all natural impacts and should not get damaged if any pedestrian stamp on top of it intentionally or unintentionally. The product should bend up to 90 degree on both sides (becoming completely horizontal), it	IRC 67:2012	Number	393.00	--
2009	Road works	51.181		BITUMNOUS CONCRETE :- Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with HIMA Grade bituminous binder like ART (Highly Modified Asphalt Binder having not less than 90°C Softening Point and not less than 90% Elastic Recovery) @ 5.4% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepeared in Batch Type Hot Mix Plant and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired 40/50 mm compacted thickness and density as per specification, complete and as per directions of Engineer-in-Charge.	As directed by Engineer-in-charge	cubic meter	11737.00	70.00
2010		51.182		Providing, Supplying, Laying & Fixing of concrete Canvas 5mm thick (flexible concrete impregnated fabirc which hardens when hydrated to form thin, durable, water proof & fire resitant concrete layer within 24 hrs) for slope protection/drain lining/concrete repair works and other similar works complete in all respect and as per direction of engineer-in-charge. Special Condition 1) Contractor shall submit all relevant test certificates of the material. 2) Mass of unset concrete canvas should be 7Kilogram/Square Metre. 3) Width of roll should be 1 m.	As directed by Engineer-in-charge	Square meter	4142.00	57.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2011		51.183		Providing, Supplying, Laying & Fixing of concrete Canvas 8mm thick (flexible concrete impregnated fabirc which hardens when hydrated to form thin, durable, water proof & fire resistant concrete layer within 24hrs) for slop protection/drain lining/concrete repair works and other similar works complete in all respect and as per direction of engineer-in-charge. Special Condition 1) Contractor shall submit all relevant test certificates of the material. 2) Mass of unset concrete canvas should be 12Kilogram/Square Metre. 3) Width of roll should be 1.1m.	As directed by Engineer-in-charge	Square meter	5800.00	54.00
2012		51.184		Providing, Supplying, Laying & Fixing of concrete Canvas 13mm thick (flexible concrete impregnated fabirc which hardens when hydrated to form thin, durable, water proof & fire resistant concrete layer within 24hrs) for slop protection/drain lining/concrete repair works and other similar works complete in all respect and as per direction of engineer-in-charge. Special Condition 1) Contractor shall submit all relevant test certificates of the material. 2) Mass of unset concrete canvas should be 19Kilogram/Square Metre. 3) Width of roll should be 1.1m.	As directed by Engineer-in-charge	Square meter	7128.00	80.00
2013		51.185		Providing, Supplying, Laying & Fixing of concrete Canvas hydro 5mm thick (flexible concrete impregnated fabirc which hardens when hydrated to form thin, durable, water proof & fire resistant concrete layer within 24hrs) for slop protection/drain lining/concrete repair works and other similar works complete in all respect and as per direction of engineer-in-charge. Special Condition 1) Contractor shall submit all relevant test certificates of the material. 2) Mass of unset concrete canvas should be 8Kilogram/Square Metre. 3) Width of roll should be 1m.	As directed by Engineer-in-charge	Square meter	6100.00	42.00
2014		51.186		Providing, Supplying, Laying & Fixing of concrete Canvas hydro 8mm thick (flexible concrete impregnated fabirc which hardens when hydrated to form thin, durable, water proof & fire resistant concrete layer within 24hrs) for slop protection/drain lining/concrete repair works and other similar works complete in all respect and as per direction of engineer-in-charge. Special Condition 1) Contractor shall submit all relevant test certificates of the material. 2) Mass of unset concrete canvas should be 13Kilogram/Square Metre. 3) Width of roll should be 1m.	As directed by Engineer-in-charge	Square meter	10381.00	56.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2015	Building Roofing	51.187		Supply and Installation of translucent roof with DPI Flux standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co-extruded UV protected polycarbonate panel system of min 12 mm thick of 900 mm (min.) width with angular daylighting concept. Panels shall have minimum six layers with truss bridge design for higher flexibility & strength. Panels with all fixing accessories to ensure best performance for wind uplift, vibration, oil canning and visual appearance. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid Separately) with 3 numbers self-drilling screws & trapezoid SS fasteners holding the base of the standing seam offering best stability having a pull-out load of min. 7000N (7KN) tested as per ISO 6892:1998 and IS 1608: 2005, as per design requirement. Panels must satisfy Dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min. of 500 Hours as per ASTM G 155. Panels shall not have Yellowness Index as per ASTM D 1925 of 15 units when tested on a sample exposed to UV for 500 Hours as per ASTM G 155. U value shall not be more than 1.6 W/m2K as per EN ISO 10077-2:2018. Panel shall be with	As directed by Engineer-in-charge	Square Metre	3887	397
2016	Building Roofing	51.188		Supply and Installation of Dpi Flux translucent roof with standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co-extruded UV protected polycarbonate panel system of min 16 mm thick of 1200mm (min.) width with angular daylighting concept. Panels shall have minimum seven layers in a truss bridge design for higher flexibility & strength. Panels with opaque and translucent clear combination as per required lux level and design requirements with all fixing accessories to ensure best performance for wind uplift, vibration, oil canning and visual appearance. Panels shall have an additional IR Blocking features for enhance thermal comfort. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid Separately) with 3 numbers self-drilling screws & trapezoid SS fasteners holding the base of the standing seam offering best stability having a pull-out load of min. 7000N (7KN) tested as per ISO 6892:1998 and IS 1608: 2005, as per design requirement. Panels must satisfy Dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min. of 500 Hours as per ASTM G 155. Panels shall not have Yellowness Index as per ASTM D 1925 of 15	As directed by Engineer-in-charge	Square Metre	4941	397

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2017	Building Roofing	51.189		Supply and Installation of Dpi Flux translucent roof with standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co-extruded UV protected polycarbonate panel system of min 18 mm thick of 1200mm (min.) width with angular daylighting concept. Panels shall have minimum seven layers in a truss bridge design for higher flexibility & strength. Panels with opaque and translucent clear combination as per required lux level and design requirements with all fixing accessories to ensure best performance for wind uplift, vibration, oil canning and visual appearance. Panels shall have an additional IR Blocking features for enhance thermal comfort. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid Separately) with a continuous aluminium I Beam holding the base of the standing seam along the length of the panel & fixed with purlin with self-drilling hex head screws offering best stability with a pull-out load of min. 21000N (21KN) tested as per ISO 6892:1998 and IS 1608: 2005., as per design requirement. Panels must satisfy Dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min. of 500 Hours as per ASTM G 155. Panels shall not have	As directed by Engineer-in-charge	Square Metre	5360	397
2018	Building Roofing	51.190		Supply and Installation of Dpi Flux translucent roof with standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co-extruded UV protected polycarbonate panel system of min 22 mm thick of 1200mm (min.) width with angular daylighting concept. Panels shall have minimum seven layers in a truss bridge design for higher flexibility & strength. Panels with opaque and translucent clear combination as per required lux level and design requirements with all fixing accessories to ensure best performance for wind uplift, vibration, oil canning and visual appearance. Panels shall have an additional IR Blocking features for enhance thermal comfort. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid Separately) with a continuous aluminium I Beam holding the base of the standing seam along the length of the panel & fixed with purlin with self-drilling hex head screws offering best stability with a pull-out load of min. 21000N (21KN) tested as per ISO 6892:1998 and IS 1608: 2005., as per design requirement. Panels must satisfy Dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min. of 500 Hours as per ASTM G 155. Panels shall not have	As directed by Engineer-in-charge	Square Metre	6035	397

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2019	Building	51.191		Providing and applying two coats of Hues Surface Coatings Clear Coat (Stone-X) with silicon technology on stones, clay tiles, bricks, facades,sand stone,plastered,texture finished interior or exterior surfaces.(It is tested with standand test method NumberIS15489:2004 & Low VOC as per ASTM D2369/ISO 11890-1 and water vapour permeability as per ASTM D-1653/ISO 7783).Surface preparation includes cleaning and scrubbing with brush,soap and water to remove all dust, fungus,cement, paints etc,washing with water all complete.The coating thickness and the methodology of application shall strictly as per manufacturer's specifitions and as approved by engineer in charge.The contractor shall give guarantee for the performance of coating for water repellency and also the durabitity of coating, all complete as per direction of Engineer - in- incharge.	As directed by Engineer-in-charge	Square Metre	258	65
2020	Building	51.192		Providing and Fixing Processed Stone Cladding on wall surface/ plywood surface. RCC pardi/ Wall and all type of Interior, Exterior Compound wall and Gate etc. of cladding processed stone with material of Processed clay, Wooden chips, Silica sand, Cement, GFRC admixtures, Colour pigments, Fiber up to thick of 230 mm/ 25 mm including scaffolding, fixing of screw, etc. (As directed by Engineer in Charge)	As directed by Engineer-in-charge	Square Metre	8551	150
2021	Road	51.193		FRP Beam Crash Barrier -- Type - A, W : FRP Beam Crash Barrier (Providing and erecting a W "FRP beam crash barrier comprising of 3 mm thick corrugated sheet FRP beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:14856 (2000) and IS:18319 (2015), FRP beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810)" As directed by Engineer incharge.	As directed by Engineer-in-charge	Running metre	3235	321
2022	Road	51.194		FRP Beam Crash Barrier -- Type - B, THRIE : FRP Beam Crash Barrier (Providing and erecting a Thrie " FRP beam crash barrier comprising of 3 mm thick corrugated sheet FRP beam rail, 85 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 2 m high with 1.15 m below ground level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:14856 (2000) and IS:18319 (2015), FRP beam rail to be fixed on the vertical post with a space of channel section 150 x 75 x 5 mm, 546 mm long complete as per clause 810)" As directed by Engineer incharge.	As directed by Engineer-in-charge	Running metre	4678	410

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
	Building	51.228	As directed by Engineer in charge	Providing and fixing in position various capacity Like 'RAINY' rainwater harvesting dual intensity auto flush open ended at drain outlet filter with working principal of COHESIVE AND CENTRIFUGAL FORCE having filter element made out of S.S. 304 screen with mesh size of 205 microns having rainfall capacity of 75 m/hr intensity with operating pressure of 0.060Kilogramper sq.cm. of Head with discharge capacity ranging from 10 to 480 lit/min including all necessary accessories like coupler,bends,PVC valve,etc fixing with Bombay nails of required length etc. complete with inlet size of 90 mm to 110 mm diameter from rooftop pipe with drain outlet of 90 mm to 110 mm diameter size with clean water outlet of 62 mm to 90 mm diameter size including fitting and fixing excluding inlet and outlet piping etc complete as per the direction by engineer in charge.	As directed by Engineer in charge			0
2023	Building	51.228.a	As directed by Engineer in charge	FL-100 for the catchment up to 110 sq.m. system size 90 mm diameter inlet, 63 mm diameter clean water outlet, 90 mm diameter drain outlet (filterain,tee,door bend, valve 63mm)	As directed by Engineer in charge	Number	7203	0
2024	Building	51.228.b	As directed by Engineer in charge	FL-150 for the catchment up to 150 sq.m. system size 90 mm diameter inlet, 75 mm diameter clean water outlet, 90 mm diameter drain outlet (filterain,tee,door bend, valve 63mm)	As directed by Engineer in charge	Number	9746	0
2025	Building	51.228.c	As directed by Engineer in charge	FL-200 for the catchment up to 225 sq.m. system size 110 mm diameter inlet, 75 mm diameter clean water outlet, 90 mm diameter drain outlet (filterain,tee,door bend, valve 75mm)	As directed by Engineer in charge	Number	10381	0
2026	Building	51.228.d	As directed by Engineer in charge	FL-300 for the catchment up to 350 sq.m. system size 110 mm diameter inlet, 90 mm diameter clean water outlet, 90 mm diameter drain outlet (filterain,tee,door bend, valve 90mm)	As directed by Engineer in charge	Number	14195	0
2027	Building	51.228.e	As directed by Engineer in charge	FL-500 for the catchment up to 500 sq.m. system size 110 mm diameter inlet, 90 mm diameter clean water outlet, 110 mm diameter drain outlet (filterain,tee,door bend, valve 90mm)	As directed by Engineer in charge	Number	20275	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2028	Surveying	51.229	As directed by Engineer in charge	To carry out linear Drone survey agencies will use fully autonomous professional survey grade drone and in post process for aerial triangulation required ground control points and benchmarks will be collected by using survey grade dual frequency DGPS-PPK system. After post processing agency will deliver following final output. 1.Geotagged images in JPG format with resolution of 4-5cm/pixel with 70% overlap 2. GCP values in .CSV format. 3. 3D point cloud cover in .las format. 4. digital surface model (DSM) in .tiff format. 5. 2D orthorectified images in .tiff format with 5 cm resolution which gives capability to capture detailed features.	As directed by Engineer in charge	anning kilometre	8500	0
2029	Surveying	51.229a	As directed by Engineer in charge	To carry out polygon Drone survey agencies will use fully autonomous professional survey grade drone and in post process for aerial triangulation required ground control points and benchmarks will be collected by using survey grade dual frequency DGPS-PPK system. After post processing agency will deliver following final output. 1.Geotagged images in JPG format with resolution of 4-5cm/pixel with 70% overlap 2. GCP values in .CSV format. 3. 3D point cloud cover in .las format. 4. digital surface model (DSM) in .tiff format. 5. 2D orthorectified images in .tiff format with 5 cm resolution which gives capability to capture detailed features.	As directed by Engineer in charge	quare kilometre	22500	0
2030	Surveying	51.230	As directed by Engineer in charge	Scanning, Digitisation and Geo-referencing of cadastral /revenue maps and interpretation of all existing features like building, water bodies, rivers, agricultural field etc to generate base map. Creation of GIS platform by using orthorectified image and revenue data by Linking of textual data(7/12) which special data(Vector digitised maps). All will helps to analyse and identify all affected properties.	As directed by Engineer in charge	quare kilometre	4000	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2031	Ceiling and roofing	51.231	As directed by Engineer in charge	FALSE CEILING SYSTEM GI METAL BIOGUARD CLIP IN PLAIN TILE WITH CARRIER SYSTEM 600 X 600MM Providing & Fixing horizontal level suspended ceiling comprising of GI Bioguard Clip-in Plain Tile 600x600mm (Nominal Size) tiles of 120 gsm galvanized steel as per IS 277 (2003) suitable for architectural finishes in 0.5mm thickness as per in IS:513 (1994) in Global white color with concealed suspension system having a bevelled edge of 3x3mm and height of 33mm on one side and 18mm on the other side. Tiles shall be flattened by precision leveller to minimize sag to less than 1/400mm. The tiles shall have double round pip of ϕ 2mm and ϕ 6mm for secure engagement and levelling respectively, along with swing down feature and special tabs to allow removal of tile to enable plenum access. The coated surface of the tile shall exhibit anti-microbial properties (eradication and inhibition of growth) and shall achieve up to 99.99% reduction in bacterial activity as per ISO22196:2011. The tile shall be electrostatically polyester powder coated using RoHS compliant powder having coating thickness ranging from 60-80 microns. The powder coating shall pass Salt Spray Test for 750 Hours as per ASTM B117, QUV –A Test for 1000hours as per ASTM G-154 – (Cycle – 1) and Humidity test for 1000hours as per DIN 50017. The powder coating shall have an adhesion of GT0 as per EN ISO 2409. The shade variation across batches shall be delta E<1 using Excite/BYK Gardner instrument and gloss level of 25±5% at 60° as per ASTM D523. The tile shall have scratch, mar & abrasive resistance properties. The tile shall have a Light Reflectance of $\geq$ 63% in accordance to ASTM 1477-98 and Fire Performance of class 0/1 as per BS 476 Part 6 & 7 in module size of 600x600mm. SUSPENSION & INSTALLATION: Shall comprise of 3000mm long ‘C’ channels of 38H x 12W mm and 1mm thick spaced at 1200mm centre to centre securely fixed to the structural soffit using threaded rod (Approved make/Third Party Supply) connecting to C-channel hanger of 109x18.5x16.5mm at 1200mm C/C and anchor fastener (Approved make/Third Party Supply). The last hanger at the end of each C-channel shall not be greater than 600mm from the adjacent wall. Use a C-channel connector of 99.5x35x 9mm for splicing together two pieces of C-channels. 4000mm Clip-in bar of 16W x 40H mm and 0.6mm thick made of galvanized steel of 140gsm as IS 277 (2003) and shall be spaced at 600mm centre to centre in a direction perpendicular to the C-channels and secured at every intersection with C-channel using a Clip-in bar hanger of 54x18x20mm. Use Clip-in bar connector to splice two pieces of Clip-in bar. Tiles shall be clipped in between two Clip-in bars from below. Optionally - Security clip to be installed to ensure the panels are positively engaged with Clip-in bar channel. Installation shall be carried out as per Manufacturer recommended procedure. Perimeter to be finished using wall angles of size 3000x19x32mm in white color secured to walls using screws at 450mm centre to centre. Cut tiles to be secured to the wall angles using a spring clamp. The Tile & Grid system used together shall carry a 10 year warranty against manufacturing defect and manufacturer shall provide a warranty certificate. The Tile & Grid shall have the manufacturers name embossed/printed on it. The supply shall be backed by a Manufacturing Test Certificate.	As directed by Engineer in charge	Square Metre	2229	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2032	Ceiling and roofing	51.232	As directed by Engineer in charge	ACOUSTICAL WALL PANELLING – FABRIC WRAPPED OF SIZE: 600X600/1200X25MM Providing and Fixing of Acoustical Wall Panel with square edges made of fibre glass substrate 25mm thick, wrapped on the front side with an acoustically transparent fabric as per the approved shade (Husk, Copper, Sangria, Sesame, Coffee, Charcoal, Titanium, Flame, Peanut and Shell). The panel shall be classified for Fire Class A, as per ASTM E-84. The Acoustical Wall Panel shall be of sizes 600x600mm (Nominal) or 600x1200mm (Nominal) and shall achieve an NRC of 0.85 (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) with 50mm airgap as per ASTM C423 to be fixed to wall on a framework of wooden battens and using Wall panel Impalers (supplied by the manufacturer) or by using construction adhesives (as per the instructions laid down by the manufacturer). The fibre glass substrate shall have a recycle content of 85%. Installation: An appropriate vapour barrier (by others) shall be applied/installed on the vertical surface before the installation to properly seal against entry of any moisture. Vapour barrier (by others) shall be installed as per Manufacturer's recommendation. Install wooden batten grid (provided by others) of section 50x50mm or as approved by the Architect on the solid wall/partition to provide level and plumb surface. The Impalers shall be fixed to the battens using self-tapping screws, 3 nos. in case of 600x600mm and 4 nos. in case of 600x1200mm. Silica based construction adhesive (by others) to be dabbed on to the projecting elements	As directed by Engineer in charge	Square Metre	6545	0
2033	Ceiling and roofing	51.233	As directed by Engineer in charge	CHANNELLED WALL PANELLING OF SIZE: 192X2400X15MM Providing and Fixing Channelled perforated panels of width 192mm, thickness of 15mm and length 2400 mm, made of a Moisture resistant fibre board substrate with a laminated facing as per the approved shade (Portland Maple, Sea Beech, Siam Wood & Mystique Walnut, Interior White, Alumina Pearl) and a melamine balancing layer on the reverse side. The boards shall have a special perforation pattern where the reverse surface has a "Helmholtz" fluted perforation with consecutive 3mm wide groove followed by 13mm or 21mm of visible pane (G-13/ G-21). The edges of the panel shall be "tongue-and-grooved" to fix special clips for installation and seamless visual. The back of the perforated panel shall have sound absorbing non-woven Soundtex acoustical fleece hot pressed to achieve NRC of 0.5. for G-21 and 0.6 for G-13. (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 and Humidity Resistance (RH) of 70% with camber limit less than 1mm/1000mm and bow less than 1mm/300mm. The panels shall be mounted on special aluminium splines (keel) using inside clips provided by Manufacturer and approved by the Architect/ Engineer-in-Charge.	As directed by Engineer in charge	Square Metre	4867	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
				Installation: An appropriate vapour barrier (by others) shall be applied/installed on the vertical surface before the installation to properly seal against entry of any moisture. Vapour barrier (by others) shall be installed as per Manufacturer's recommendation. Install wooden batten grid (provided by others) of section 50x50mm or as approved by the Architect on the solid wall/partition to provide level and plumb surface for fixing Keel. Install Keel vertically using screws and plugs at spacing of not more than 600mm centre-to-centre. The first and last keel should not be more than 150mm from the ends. Trim the tongue of the first bottom panel and install using headless nail with groove side upward. Subsequent panels are installed with tongue side downward by engaging with each other using tongue and groove mechanism and secured by inside clip. Continue this process until required height is achieved. Shorter butt edges need to be joined using industrial/wood glue. The keel shall also be used for transition of the butt end of adjacent panel at every 7.2m. Install the Skirting (provided by others) of width 50mm or more as required by the Architect/ Engineer-in-Charge. Finish off the edges using wooden moulding of matching colour (by others). Installation should be carried out as per Manufacturer recommended procedure.				

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2034	Ceiling and roofing	51.234	As directed by Engineer in charge	Providing & Fixing Of Classic Axiom Perimeter Trim with 19mm face for perimeter solution of acoustical ceiling using appropriate Accessories Classic Vector Axiom (AX4VESTRI/ AX4VECURI xx) to offer perimeter solution with acoustical ceiling system. Classic Vector Axiom (AX2STR42I/ AX2CUR42Ixx) is made of extruded aluminum of O/L dimension of 19.3 x 100 x 3000mm. The inverted F- Shape section provides 2 flanges and 19mm face for resting of tiles. Classic Axiom must be powder coated in Global White. Profile to have engineered design boss for fitment of Tee bar connector, Splice plate Corner connector & hanger clips. Classic Axiom (AX4VECURI xx) can be curved to a minimum radius of 600mm Axiom Splice Plate (AX4SPLICEI/AXSPLICEI): Formed to fit into special boss in the Axiom and locked in place with factory-installed screws. These Steel splice plates (AX4SPLICEI) are used to align and secure all joints between sections of Axiom trims. Corners are to be formed by mitering the end of axiom and splice plate (AXSPLICE) to be bent at right angle for connecting the end pieces. Axiom Tee-Bar Connection Clip (AXTBCI): Commercial quality G.I formed to fit into special boss of trim and locked in place by factory-installed screws and attached to (XL-24 / XL-15/Silhouette) suspension system members. T-Bar connection clips are used to attach the Axiom to the supporting Suspension system members. One clip is required at each location where the grid system intersects the Axiom trim. Hanging Grid clips (AXHGCI): Axioms to be hung independently to the structural soffit by engaging the Hanging Grid Clip into the boss of the Axiom trim channel and securing it to structural soffit Suspension . INSTALLATION: Hang the sections of Axiom Trim onto the grid system by engaging the top ear of the connection clip under the boss of the channel trim. Slide the lower leg downward to engage the lower boss on the trim and secure by tightening the locking screw. Complete the installation of all channel trims sections. Install and secure the splice plates,	As directed by Engineer in charge	Running metre	1196	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2035	Furniture	51.235	As directed by Engineer in charge	Supply, fixing and installation of 4mm thick Aluminium Composite Panel (ACP) of approved colour for external cladding in combination of solid and metallic colours, including all necessary Framework, support and complete weather sealing as per architectural drawing. The Aluminium Composite Panel (ACP) should be made out of thermoplastic core of low-density polyethylene LDPE (100% virgin mix), sandwiched between two aluminium sheets of ALLOY GRADE- 5000 series, each not less than 0.50 mm thick, total thickness of aluminium composite panels not to be less than 4 mm, the exposed surface thereof shall have Stove lacquered finishing coat not less than (26 + - 2) micron (containing minimum 70% kynar 500 based PVDF) of colour and shade as per architectural design. The inside surface (facing the building exterior surface) shall have polyster based powder coating not less than 25 Micron with protective peel-off foil on the exterior face (peel off film will in no case leave any adhesive mark over the composite panel surface after it is peeled off). The supporting framework shall be made out of 50 mm X25mm X 3mm thick Aluminium section to be spaced horizontally and vertically for fixing of panel of size 900 mm X 1200 mm and fixed to the building structure as per design through 50mm X50mm X5 mm MS angle clamps prefixed to masonry or slab, columns with Hilti make anchor fastener screws. The fixing of panel to be done with the help of VHB tapes and screws and all the sealing of joints to be done with weather sealent Silicon as directed by Engineer-in-charge. (Prior permission of S.E. is necessary before inclusion of this item in estimate)	As directed by Engineer in charge	Square metre	3279	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2036	Furniture	51.236	As directed by Engineer in charge	Supplying and fixing of 6mm thick Exterior Compact Laminate or High Pressure Laminate of approved colour by approving authority with UV resistant Decorative colour paper on both side typically made out of multiple layers of craft papers and then impregnated with thermosetting phenolic resins, on top of it melamine treated barrier paper and decorative paper and wear layer on both the sides saturated with melamine resins and then covered with UV resistant acrylic resin layer which makes it extremely durable and weather resistant compressed together on extremely high pressure and hardened with electron beam curing to get the total desired thickness of 6mm matching European standard specification as per EN 438 -part 6, protected with 60 Micron protective peel-off film on both side which in no case leave any adhesive mark over the panel surface after it is peeled off. Fixing of the same to be done on a supporting frame of 50 mm X 5 mm X 3 mm powder coated aluminium box section to be spaced horizontally and vertically in 600mm X 600mm grid and fixed to building structure as per design through 50mmX50mmX mm 5 mm MS angle bracket prefixed to masonry slab or columns with Hilti make anchor fastener along with all related hardware and fixtures. The panel should then be fixed on the Aluminium section with the help of pure polyester exterior grade colour coating rivets as per architectural drawings or as directed by Engineer-in-charge. Each panel should be riveted on substructure maintaining a gap of 6mm on all the sides between each Panel for Air circulation and expansion and contraction as per installation specifications provided by the manufacturer. The cost shall include all expenses related to storage, material handling, lifting, freight, labour, scaffolding etc as directed by Engineer-in-charge. (Prior permission of S.E. is necessary before inclusion of this item in estimate)	As directed by Engineer in charge	Square metre	5648	0
2037	Road furniture	51.237	As directed by Engineer in charge	Providing and Laying of 2 or more sets (6 Nos. each set) Dual Ribs Pattern Rumble Markings on roads with vehicular speeds of more than 50 Km/hr laid as per the spacing recommended for each set under Table 11.1 and Fig. 11.2 of IRC 35:2015 using Plastirib 2K, or equivalent 2 component cold plastic profiled material. Each Dual Rib pattern rumble marking shall have width of 500 mm. Each dual rib pattern rumble marking shall have 2 ribs each of Width of 60 mm and height 20 mm. Gap between two ribs shall be 300 mm. Each rumble marking shall be made complete with drop on Soild Plus reflective glass beads @ 300 gm / Square Metre spread throughout the surface of marking. The finished surface to be levelled, uniform and free from streaks and holes, including surface cleaning and cost of all materials etc. complete. as directed by Engineer-in-charge.	As directed by Engineer in charge	Square metre	4580	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2020-21 Additional New items								
2038	Bridge cum Bhandara	52.01		Providing , constructing and fixing Precast M 30 grade Self Compacted Concrete of required thickness of curved section to serve as arch type bandhara as per the standard drawing , cast in suitable casting yard including cost of all basic materials ,labour , charges for casting formworks, TMT (Fe -500) reinforcement as per standard drawings required for arches only , casting of end pillars and bottom haunch as per drawing at site ,transportation of arch segment to site from casting yard , unloading and erecting the same at site to make arch shape Bandhara , filling joints of Arch segment with M-30 grade self compacted concrete at site , providing waterproofing impermeable geotex membrane at joints as per standard drawings and providing all requisite safety measure during casting and erecting the arches (excluding transportation of basic material from quarry / market) etc complete.				
2039		a		a) 125 mm Thick precast (For span Upto 6.50 M)	As directed by Engineer in charge	Square meter	3849.00	1155.00
2040		b		b) 150 mm Thick Precast (For Span above 6.50 m to 10.00 m)	As directed by Engineer in charge	Square meter	4337.00	1301.00
	Bridge cum Bhandara	52.02		Providing and casting in situ RCC M 30 grade Self Compacted Concrete of required thickness for arch type bandhara as per the standard drawing including cost all basic material ,labour , including cost of formworks, TMT (Fe500) reinforcement as per standard drawings required for arches only , casting of end pillars and bottom haunch as per drawing to make arch shape Bandhara , providing waterproofing impermeable geotex membrane at joints and providing all requisite safety measure during construction of the arches (excluding transportation of basic material from quarry / market) etc complete.				
2041		a		a) 150mm Thick (For span Upto 6.50 M)	As directed by Engineer in charge	Square meter	4179.00	1254.00
2042		b		b) 200 mm Thick (For Span above 6.50 m to 10.00 m)	As directed by Engineer in charge	Square meter	4976.00	1493.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2043	Bridge cum Bhandara	52.03		Appointing Expert /Professional Consultant for selection of Bandhara sites upto 100 m length having minimum 2 visits per bandhara , noting the broad features like span, height, type of foundation, special features specific to the site to come to the conclusion of adopting standard design & drawing, checking suitability of site, finalizing site for construction of Bandhara and submitting the observation note accordingly to Department. (Transportation from Regional Head quarter to actual site and accomodation at site / Taluka head quarter / District Headquarter is not included in this item and it shall be paid separately wherever necessary.)	As directed by Engineer in charge	Per Site	7000.00	-
2044	Bridge cum Bhandara	52.04		Detailed survey for bandhara - Taking longitudinal section of stream extending 1.20 km on upstream and downstream side of the bandhara site, taking cross sections at every 100 m interval of the stream on upstream side, taking bed slope of stream and other details, taking 3 trial pits 1.00 m x 1.00 m x 3.00 m, plotting details of stratification indicating type of soil/rock, preparation of detailed survey data including preparation of hydraulic design including calculations for afflux, height of the weir and storage capacity of bandhara etc., obtaining the village map and studying the land width of nalla, make a preliminary assessment of likely storage of nalla with nalla training as per width shown in village map, marking on village map the locations of existing wells, bore wells within radius of 1.5 km by total station and also depth of water and borewell depth, identifying the maji malgajari tanks or other lakes owned by Govt. within radius of 3 km, assessing the radial distance and plan area as per village map, preparing detailed plans referring the std. design & drawing and preparing detailed estimate as per approved SSR in 3 copies and submitting the project duly typed along with relevant drawings in hard and soft copies in CD / Pen Drive etc. as required by the Department.	As directed by Engineer in charge	Per No	126012.00	-
2045	bambusa bamboos item	52.05		Providing and constricting Rammed Earth walls built out of normal compacted soil with temporary steel formwork, similar to one for concreting, has to be erected; soil is placed into the framework and compacted. Soon after finishing compacting, the formwork can be removed. The ideal soil for this kind of building consists in a good mix of different sizes of granularity, from clay (about 10-40%) to silt (about 10-40%) to sand (about 35-65%) and even very fine gravel. Top soil and organic soil have a strong smell of moldy, especially when fresh or humid are not suitable for building.The mix for rammed earth wall shall consist of soil, sand and cement / lime (5% to 8%) as binding material. The minimum thickness shall be around 35cm, mainly to allow stability and thermal mass. The work must got done under supervision of an experience Mason including necessary scaffolding, formwork, labour, material and finishing etc. complete.	As directed by Engineer in charge	Cum	11300.00	6540.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2046	bambusa bamboos item	52.06		Providing and fixing after cutting in proper size and shape bambusa pole of bambusa balcoa / bambusa bamboos or equivalent with minimum wall thickness of 10mm & distinctive internodes of 300 mm max Size 100mm (+/- 10mm) dia. (i.e., 100mm dia. in bottom & top dia. should not be less than 75mm & average dia. should not be less than 85 mm, taper length should not be more than 2.5mm per Running metre), well seasoned by freshly cut canes including treatment with preservative inside the bamboo pole, & dosing with CCB (Chromium Copper Bromate) using pressure vacuum treatment plant with retention level minimum 8 % and in accordance with IS 9096. The framing is connected by articulated joints preferred with bamboo wedging without filling, including bending, bunching of bamboos as per design with bamboo pegs in inclined 45 degree manner, SS bolt (304 Grade), studs (304 grade), GI plates coated with epoxy coating, including transportation and cost of material, antiabrasive fire retardant coating (Two coats before bunching and final coat after complete installation as directed by Engineer in Charge), necessary scaffolding with all lead, lift, machinery & equipment charges, etc. complete, as directed by the Engineer in charge. Bamboo pole for Main structure like Beam, Column etc. or as per design	As directed by Engineer in charge	Running metre	2000.00	706.00
2047	bambusa bamboos item	52.07		Providing and fixing after cutting in proper size and shape bambusa pole of bambusa balcoa / bambusa bamboos or equivalent with minimum wall thickness of 10mm & distinctive internodes (300mm max) Size 75mm (+/- 8mm) (i.e., 75mm dia. in bottom & top dia. should not be less than 50mm & average dia. should be 60mm & taper length should not be more than 2.5mm per Running metre), dia well seasoned by freshly cut canes including treatment with preservative inside the bamboo pole,& dosing with CCB (Chromium Copper Bromate) using pressure vacuum treatment plant with retention level minimum 8 % and in accordance with IS 9096. The framing is connected by articulated joints preferred with bamboo wedging without filling, including bending, bunching of bamboos as per design with bamboo pegs in inclined 45 degree manner, SS bolt (304 Grade), studs (304 grade) of bamboos as per design GI plates coated with epoxy coating, including transportation and cost of material, antiabrasive fire retardant coating (Two coats before bunching and final coat after complete installation as directed by Engineer in Charge), necessary scaffolding with all lead, lift, machinery & equipment charges, etc. complete, as directed by the Engineer in charge. Bamboo pole for Main structure like Beams,columns etc as per design and drawing	As directed by Engineer in charge	Running metre	1605.00	706.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2048	bambusa bamboos item	52.08		Providing and fixing after cutting in proper size and shape bamboo pole of dendrocalamus stocksii or equivalent with minimum wall thickness of 10mm & distinctive internodes (300mm max) Size 50mm (+/- 5mm) (i.e., 50mm dia. in bottom & top dia. should not be less than 35mm & average dia. should be 40mm dia. & taper length should not be more than 2.5mm per Running metre) which is well seasoned by freshly cut canes including treatment with preservative inside the bamboo pole, & dosing with CCB (Chromium Copper Bromate) using pressure vacuum treatment plant with retention level minimum 8 % and in accordance with IS 9096. The framing is connected by articulated joints preferred with bamboo wedging without filling, including bending of bamboos as per design or SS bolt, studs (304 grade), GI plates coated with epoxy coating, including transportation and cost of material, antiabrasive fire retardant coating (Two coats before bunching and final coat after complete installation as directed by Engineer in Charge), necessary scaffolding with all lead, lift, machinery & equipment charges, etc. complete, as directed by the Engineer in charge. Bamboo pole for Purlins, Ties, Facia, Gap Filling etc	As directed by Engineer in charge	Running metre	1015.00	442.00
2049	bambusa bamboos item	52.09		Providing and fixing Bamboo jaffery/ fencing consisting of superior quality (Dendrocalamus Stocksii) or equivalent 25 mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50 X 25 mm, fixed with nails and G.I wire on existing support complete with scaffolding if required, labour and material charges as per direction of Engineer-in-charge. Bamboo pole 25mm & 2.5m long require for Bamboo jaffery.	As directed by Engineer in charge	Square Metret	1340.00	458.00
2050	bambusa bamboos item	52.10		Providing and fixing Bamboo Shingle roofing with top layer of Bamboo shingles, made of flattened CCB pressure treated bamboo of 50-100mm dia and in size of 450mm x150mm and 3 to 5 mm thick laid over bamboo battens of minimum 25mm thickness, perpendicular to rafter/Beam at spacing of 150mm c/c including laying of bituminous sheet 3 mm thick and minimum overlap of 300 mm placed over sub-purling which is laid parallel to main rafter /beam consisting of 50mm dia not less than 3m length at spacing of 300mm c/c on treated Bamboo woven matt of approved design made out of thin Bamboo strips, supported by CCB treated Bamboo purlins of min dia 50mm not less than 3m length at spacing of 300mm c/c and WPC sheet 6 mm thick, junction details as per drawing and design including all Bamboo accessories like CCB treated Shingles, antiabrasive fire retardant coating (top and bottom surfaces of roofing system as directed by Engineer in Charge), Bamboo, bamboo mats, SS clamps, nails, Screws, including required scaffolding and cost of labour material with all lead & lifts and machinery & equipment charges, etc complete. Ground Floor	As directed by Engineer in charge	Square meter	10150.00	1100.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2051	bambusa bamboos item	52.11		Providing and fixing in position Phenol bonded Bamboo wood flooring with planks of sizes 14mm thick, 1800 mm length (minium) and 130 mm wide (minimum), in approved colour, texture and finish, having Performance Appraisal certified (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The flooring shall be fixed with tongue and groove interlocking system, with underlayment of 4mm thick expanded poly ethylene foam sheets having density 40Kilogram/One Cubic metre, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and door reducer of size 1900mm x 44mm, wherever required. The bamboo wood planks shall have minimum density of 1000 Kilogram/One Cubic metre & minimum Hardness 1000Kilogramf. with Eco friendly UV coating, all complete as per direction of Engineer in -charge. Ground floor	As directed by Engineer in charge	Square meter	5006.00	64.00
2052	bambusa bamboos item	52.12		Providing & fixing in position Phenol bonded Bamboo wood partition 60mm thick at all height with planks of size 10mm thick, 1800mm length (minimum) and 130mm (minimum), in approved colour, texture and finish, on both side having Performance Appraisal Certificate (PAC) issued by Building Material & Technology Promotion Council (BMTPC), with necessary profiled edges fixed with 40 mm SS screws 5nos in each tile to frame made of second class teak wood of size 40 x 40 mm in center of each tiles and bottom / top of work height. The bamboo wood planks shall have minimum density of 1000Kilogram / cum & minimum Hardness 1000Kilogramf. with Eco friendly UV coating, all complete as per direction of the Engineer in -charge.	As directed by Engineer in charge	Square Metret	9650.00	110.00
2053	bambusa bamboos item	52.13		Providing & fixing after cutting in proper size & shape bamboo pole of Dentreocalamus stocksii with minimum wall thickness of 10 mm of size 50 mm(+/- 5 mm) diameter (i.e., 50mm dia. in bottom & top dia. should be 35mm & average dia. should not be less than 40mm & taper length should not more than 2.5mm per Running metre), which is well seasoned by freshly cut canes including treatment with preservative inside the bamboo pole & dosing with CCB (Chromium Copper Bromate) using pressure vacuum treatment plant with retention level of minimum 8% and in accordance with IS 9096. These bamboos are used for making beams & columns including bending of bamboos, joining, bunching of bamboos, assembly and its installation as per design using bamboo pegs (45 degree), SS Studs fixed with nuts & bolts (304 grade), GI plates coated with epoxy coating, including transportation & cost of material, antiabrasive fire retardant coating before bunching of bamboos(Two coats before bunching and final coat after complete installation as directed by Engineer in Charge) , necessary scaffolding with all lead, lift, machinery & equipment charges, etc. complete, as directed by the Engineer in charge	As directed by Engineer in charge	Running metre	1225.00	571.00

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2054	bambusa bamboos item	52.14		Providing and fixing in roof system after cutting in proper size and shape Griha Certified WPP sheet made of wood polymer composite - WPC) of thickness 6mm, density more than 550 Kilogram/cum, having proper screw holding capacity. This board shall not be pasted with treated bamboo mats and fixed over bamboo purlins with SS Nails/SS Screws. The bamboo mat design visible from below may be hapazard. The rates shall be including trasportation, cost of WPC Board and all fixtures and fastenings with necessary scaffolding with all lead and lift, machinery and equipment charges etc. complete as directed by Engineer in charge.	As directed by Engineer in charge	Square meter	1430.00	208.00
2055	bambusa bamboos item	52.15		Providing and fixing of Aerocon panel of approved make of size 3.00 mtr × 0.6 mtr and thickness 75mm on MS ANGLE 75mm × 75mm × 5mm in length & 50mm × 5mm flats in longitudinal on spacing of 600mm direction welded back to back with required screws including fixtures and fastenings, gaps to be filled by POP with necessary scaffolding with all lead and lift, machinery and equipment charges etc. complete as directed by Engineer in Charge	As directed by Engineer in charge	Square Metret	4275.00	863.00
2056	bambusa bamboos item	52.16		Supply & Application of Fire retardant Polish with Fire Retardant sealer field coat of approved make & one, two or three coats. Top Coat to provide class-I surface spread of flame as per BS:476 Part 6 & 7 and IS-12777 in clear shade including cleaning, injecting of fire retardent sealer and preparation of surface including transportation and cost of material, necessary scaffolding with all lead, lift, machinery & equipment charges, etc. complete as per instructions of Engineer-In-Charge/Manufacturers specification,3- Apply Two coats of fire retardant clear solvent based top coat which specific gravity should be 0.97 in regular 4-6 hour duration	As directed by Engineer in charge	Square meter	1512.00	195.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2057	Waterproofing	52.17		Waterproofing Treatment to new terrace by using Polymeric Cementitious Membrane as approved by Engineer in charge, followed by 112mm thick brick bat coba covered with 20 mm mortar finish. If there are cracks on the bare slab, open the crack in V Groove and fill it with ready to use repair polymer modified mortar based on special cements, aldehyde based polymers with thixotropy modifying agents. If there are lots of honeycombs and identified bad patches of concrete the same should be grouted as per the instructions of site incharge. (The grouting shall be paid separately). Clean the entire surface thoroughly and over this prepared surface, apply three coats of polymeric Cementitious waterproofing coating having a non-toxic, 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) based polymeric waterproofing solution as approved by Engineer in charge. Provide and lay 112 mm average thicknes of brick bat coba in cement mortar 1:5 over 12mm thick CM 1:3 bedding with one pouch of 330 grams of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents as approved by Engineer in charge per 50Kilogrambag of cement and finishing with 20 mm thick cement plaster in cement mortar 1:3 by mixing one 330 grams pouch of above admixture per 50Kilogrambag of cement, including all lead, lifts and laid to proper slope to drain off water entirely preparing bell mouth including watta, beveled or champhered portion at the junction of parapet and work up to a height of 300 mm or as directed and including finishing the top layer of waterproofing treatement with false marking of 30 cm x 30 cm or as directed, curing and covering the whole treatment. MPBP	As directed by Engineer in charge	Square Metre	1454.00	766.00
2058	Waterproofing	52.18		Waterproofing Treatment to new Toilet/bathroom by using Polymeric Cementitious Membrane as approved by Engineer in charge, followed by 112mm thick brick bat coba covered with 20 mm mortar finish. If there are cracks on the bare slab, open the crack in V Groove and fill it with ready to use repair polymer modified mortar based on special cements, aldehyde based polymers with thixotropy modifying agents. If there are lots of honeycombs and identified bad patches of concrete the same should be grouted as per the instructions of site incharge. (The grouting shall be paid separately). Clean the entire surface thoroughly and over this prepared surface, apply three coats of polymeric Cementitious waterproofing coating having a non-toxic, 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) based polymeric waterproofing solution as approved by Engineer in charge. Provide and lay 112 mm average thicknes of brick bat coba in cement mortar 1:5 over 12mm thick CM 1:3 bedding with one pouch of 330 grams of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents as approved by Engineer in charge per 50Kilogrambag of cement and finishing with 20 mm thick cement plaster in cement mortar 1:3 by mixing one 330 grams pouch of above admixture per 50Kilogrambag of cement, including all lead, lifts and laid to proper slope to drain off water entirely preparing bell mouth including watta, beveled or champhered portion at the junction of wall and work up to a height of 300 mm or as directed and including finishing the top layer of waterproofing treatement with false marking of 30 cm x 30 cm or as directed, curing and covering the whole	As directed by Engineer in charge	Square Metre	1454.00	766.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2059	Waterproofing	52.19		Waterproofing treatment to new terrace by using chlorinated paraffinated talcum polyurethane (CPTP) elastomeric membrane as approved by Engineer in charge, followed by average 112mm thick brick bat coba covered with 40mm thick IPS. The procedure includes filling of cracks on the RCC slab with high performance polyurethane (liquid applied) membrane. Clean the entire surface thoroughly and over this prepared surface, apply a primer coat of high performance polyurethane (liquid applied) membrane as approved by Engineer in charge. Apply the primer by roller. Extend the coating to parapet walls including the top of parapet. Allow the primer coat to set for 24 hrs. After the primer coat is set, apply two coats of chlorinated paraffinated talcum polyurethane (CPTP) elastomeric membrane as approved by Engineer in charge on surface. Ensure that pinholes are touched up properly. While the second coat of high performance polyurethane (liquid applied) membrane is wet and tacky, sprinkle coarse sand over the surface to make it rough and provide mechanical key for further treatment. Provide and lay average 15 mm thk protective coat of CM in 1:4 over the surface and allow to set and cure. Provide and lay 112 mm thk BB coba in average thickness in cement mortar 1:5 with one pouch of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents - which is based on special cements, aldehyde based polymers, shrinkage compensating agents and selected sands having high abrasion resistance as approved by Engineer in charge per 50Kilogram bag of cement and finishing with 40 mm thick IPS layer in M-20 CC by mixing one pouch of 330 grams of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents per 50Kilogram bag of cement, including all leads, lifts and laid to proper slope to drain off water entirely preparing bell mouth including watta, beveled or chamfered portion at the junction of parapet and work up to a height of 300 mm or as	As directed by Engineer in charge	Square Metre	2947.00	766.00
2060	Waterproofing	52.20		Waterproofing treatment to new terrace by using chlorinated paraffinated talcum polyurethane (CPTP) elastomeric membrane as approved by Engineer in charge, followed by average 112mm thick brick bat coba covered with 40mm IPS. The procedure includes filling of cracks on the RCC slab with chlorinated paraffinated talcum polyurethane (CPTP) elastomeric membrane. Clean the entire surface thoroughly and over this prepared surface, apply a primer coat of CPTP admixed appropriately in dimethyl benzene Primer as approved by Engineer in charge. Apply the primer by roller. Extend the coating to parapet walls including the top of parapet. Allow the primer coat to set for 24 hrs. After the primer coat is set, apply two coats of continuous chlorinated paraffinated talcum polyurethane (CPTP) elastomeric membrane as approved by Engineer in charge on surface. Ensure that pinholes are touched up properly. While the second coat of CPTP is wet and tacky, sprinkle coarse sand over the surface to make it rough and provide mechanical key for further treatment. Provide and lay average 15 mm thk protective coat of CM in 1:4 over the surface and allow to set and cure. Provide and lay 112 mm thk BB coba in average thickness in cement mortar 1:5 with one pouch of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents - which is based on special cements, aldehyde based polymers, shrinkage compensating agents and selected sands having high abrasion resistance as approved by Engineer in charge per 50Kilogram bag of cement and finishing with 40 mm thick IPS layer in CC M – 20 by mixing one pouch of 330 grams of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents per	As directed by Engineer in charge	Square Metre	2046.00	766.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2061	Waterproofing	52.21		Removing loose rust from the reinforcement bars by wire brushing, light hammering etc. and applying sulphate and chloride free inorganic single component rust remover Rusticide as approved by Engineer in charge conforming to IS 9077. The rusted surface shall become blackish non rusted colour. After 24 hours of application of rust remover, loose particles shall be removed by brush. Apply one more coat of Rusticide. Apply bonding coat slurry of high performance acrylic polymer - Methyl 2-methylpropenoate copolymer with another enoate as approved by Engineer in charge on entire surface. Mix 1Kilogramof acrylic polymer with 0.5Kilogramof cement. Finish it with ready to use repair polymer modified mortar based on special cements, aldehyde based polymers with thixotropy modifying agents as approved by Engineer in charge (The Polymer Modified Mortar (PMM) should attain min. compressive strength of 20 N/mm2 in 1 day and 30 N/mm2 in 7 days) by adding 13 - 16% water by weight of polymer modified mortar for treatment to the damaged RCC members. Add 1Kilogramof Migrating Corrosion Inhibiting Admixture as approved by Engineer in charge per 25Kilogramof polymer modified mortar. After mixing polymer modified mortar, it can be trowel applied or sprayed. When applying by hand, polymer modified mortar must be forced tightly into the substrate to ensure complete contact with the substrate. (If scaffolding is required, same shall be provided and will be paid under relevant item) (Upto 15 mm thickness at a time).	As directed by Engineer in charge	Square Metre	2113.00	356.00
2062	Waterproofing	52.22		Removing loose rust from the reinforcement bars by wire brushing, light hammering etc. and applying sulphate and chloride free inorganic single component rust remover Rusticide as approved by Engineer in charge conforming to IS 9077. The rusted surface shall become blackish non rusted colour. After 24 hours of application of rust remover, loose particles shall be removed by brush. Apply one more coat of Rusticide. Apply bonding coat slurry of high performance acrylic polymer - Methyl 2-methylpropenoate copolymer with another innovate as approved by Engineer in charge on entire surface. Mix 1Kilogramof acrylic polymer with 0.5Kilogramof cement. Finish it with ready to use repair polymer modified mortar based on special cements, formaldehyde based polymer with thixotropy modifying agents as approved by Engineer in charge (The Polymer Modified Mortar (PMM) should attain min. compressive strength of 20 N/mm2 in 1 day and 30 N/mm2 in 7 days) by adding 13 - 16% water by weight of polymer modified mortar for treatment to the damaged RCC members. Add 1Kilogramof Migrating Corrosion Inhibiting Admixture as approved by Engineer in charge per 25Kilogramof polymer modified mortar. After mixing polymer modified mortar, it can be trowel applied or sprayed. When applying by hand, polymer modified mortar must be forced tightly into the substrate to ensure complete contact with the substrate. (If scaffolding is required, same shall be provided and will be paid under relevant item) (15-30 mm thickness at a time).	As directed by Engineer in charge	Square Metre	1424.00	171.00

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2063	Waterproofing	52.23		For Strengthening of concrete RCC, Columns, Beams, Slabs, Foundation etc. Execute the work as follows. Remove dust, laitance, grease, oil, curing compounds, waxes, foreign particles, coatings and disintegrated materials by mechanical means (i.e., blast cleaning). Empty entire pre-packed and pre-weighed contents of 'B' Component into pail containing 'A' Component. Mix for 30 seconds with a low speed stirrer. (400-600 rpm). After proper mixing of component 'A' and 'B', now empty entire pre-packed and pre-weighed part 'C' component into the mix and using a mechanical stirrer mix all the components for 1-3 minutes with a low speed stirrer (400 to 600 rpm). Caution: Mix only that limited quantity which can be placed within the pot life. Material should be quickly brushed/ poured from pail onto concrete surface to obtain prolonged working life. Inspect the underside for evidence of full depth cracks that may require additional treatment to prevent draining of the resin. Cracks greater than 1/8" width should be repaired individually. Fill 1/8" or larger cracks with loose sand and pour small quantity of mixed 2-(methoxycarbonyl)-1-Propene Resin Sealer Cum Grout as approved by Engineer in charge into the crack, allow to cure. The above Material is spread evenly on the surface as a flood coat with a squeegee or rollers on horizontal and vertical surfaces and allowed to absorb completely into the concrete substrate. Drill injecting holes to a depth of 2 - 4" in concrete depending upon the width of crack, extent of damage and dimension of structural element. Fix the grouting nozzle and inject the mixture of 2-(methoxycarbonyl)-1-Propene Resin Sealer Cum Grout at pressure of 50 - 100 psi. (Rate for fixing nozzle is not included in this item). Low Viscosity, Transparent, Three Component, 2-(methoxycarbonyl)-1-Propene Resin Sealer Cum Grout should have following minimum properties: 1. Viscosity: < 5 cps 2. Flexural Strength (ASTM D-790): 1 day - 17.2 MPa	As directed by Engineer in charge	Kilo Gram	1790.00	856.00

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2064	Waterproofing	52.24		Providing and applying one coat of thiazolinones (TZ) based Microbial Wall Wash and Anti-rooting Solution treatment as approved by Engineer in charge to entire surface of external wall. At the junction of chajja and wall and also on the parapet wall top, give a coat of anti fungal treatment. Cracks, if any, shall be filled with acrylic polymeric non-shrink crack filler putty as approved by Engineer in charge, before giving waterproofing treatment to the external surfaces. This is followed by one coat of 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) based polymeric waterproofing solution as approved by Engineer in charge, having a non-toxic acrylic polymer liquid and white cement mix in proportion 1:1 by weight with coat interval as 24 hours. Air curing shall be done for 24 hours. Before giving this treatment the entire surface of wall shall be thoroughly cleaned to remove existing paint, dust, dirt, oil etc. After the waterproofing treatment is cured, provide and apply two coats of titanium dioxide based 2-(methoxycarbonyl)-1-propene-butyl-2 propenoate (TMPBP) emulsion, heat insulating, waterproofing exterior coating as approved by Engineer in charge in the desired shade. The inter-coat gap to be 24 hours. The rate shall include complete treatment mentioned above. 100% Acrylic, Decorative, Waterproofing, Heat Insulating, Exterior Coating, Anticarbonation Coating should have following minimum properties: 1. Specific Gravity: 1.3 ± 0.1 at 25°C 2. pH: 7.0 to 10.00 3. Viscosity: 18 to 30 sec. at 25°C by Ford Cup Number B-4 (Dilute 2 parts of product with 1 part of water) (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Square Metre	350.00	177.00
2065	Waterproofing	52.25		Providing and fixing zinc alloy based galvanic disk type sacrificial anodes (50 mm dia, 18 mm thick) as approved by Engineer in charge to the reinforcement, that should have a 3 years track record of use in PWD projects, 4 year track record in corrosive region of abroad and pass 500 hours salt spray test as per ASTM B 117. The anode shall be connected to the reinforcement steel by connectors provided with the anode. Sacrificial Galvanic Anode should have following minimum properties: 1. Base: Zinc Alloy 2. Conformance: ASTM B 418 Type II 3. Zinc Mass: Min 40 g per anode 4. Geometry: Disc Type 5. Diameter: 50 mm 5. Height: 18 mm 6. Surface Area: 6751 sq mm It shall be applied as per manufacturers specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Square Metre	1073.00	29.00

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2066	Waterproofing	52.26		Make the surface clean of loose particles, dirt, dust, oils, and paints etc. by wire brush. Remove all laitance from surface. On the entire clean surface, apply a coat of Ter polymer of enoates of 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) and propenonitrile as approved by Engineer in charge and cement (1:0.25) by spray or ordinary cement brush. Fill up all bug holes with above slurry. Apply slurry generously on entire surface without pinholes. Similar treatment to be given to other block surface immediately. Place coated area of one block over coated area of another block immediately after application. Polymeric bonding agent to be used for AAC Block to AAC Block & CC Brick Block to CC Brick Block should have following minimum properties: 1. Base: Polymeric Emulsion 2. Specific Gravity: 1.03 ± 0.02 3. pH Value: 7.5 - 8 It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Square Metre	154.00	24.00
2067	Waterproofing	52.27		It is ready to use inorganic, bio compatible, low viscosity, non hazardous, soil stabilizing two component colloidal silica base chemical grout. Providing and carrying out this grouting to stabilize the strata above the tunnel, foundations, cutting slope stabilization and sub structures by using ultimate fine Nano grout as approved by Engineer in charge. Drill injecting holes to required depth in loose soil strata. Fix the grouting pipes. Grout must be continuously stirred during addition of accelerator and fully mixed to transparent solution prior to grouting into the soil/strata. No white precipitates should remain in the grout mix. This is ultimate fine grouting can be completed by Nano grout. Solvent Free, Inorganic, Hydrophilic, Non-hazardous, Low Viscosity Chemical Grout for Stabilization and Consolidation of Sandy/Silty Soil should have following minimum properties: Grout: (Rate for fixing nozzle is not included in this item). 1) Specific Gravity: 1.2 ± 0.1 2) pH: 11.3 ± 0.1 3) Viscosity in B4 Ford cup at 28°C: 12-15 sec Accelerator: 1) Specific Gravity: 1.07 ± 0.01 2) pH: 7.0 ± 0.1 3) Viscosity in B4 Ford cup at 28°C: 10-12 sec Sungeogrout Mix: 1) Specific Gravity: 1.2 ± 0.1 2) Viscosity in B4 Ford cup at 28°C: 12-15 sec It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	561.00	290.00

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2068	Waterproofing	52.28		Waterproofing Treatment to plastered surface of toilet & bathroom walls minimum up to 90 cm (Dado) by using 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) based polymeric waterproofing solution as approved by Engineer in charge. Clean the entire surface thoroughly and over this prepared surface, apply three coats of 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) based polymeric waterproofing solution as approved by Engineer in charge. While the 3 coat is wet broadcast sand on the surface. Provide 20 mm thick cement plaster in CM 1:3 with one pouch of 330 grams of thorough blend of special cements, aldehyde based polymers, shrinkage compensating agents as approved by Engineer in charge per 50 Kilogram bag of cement including all lead, lifts, curing etc complete. Acrylic Polymeric Waterproofing Coating for Concrete and Masonry should have following minimum properties: 1. Elongation % (ASTM D412-2016): @ 100% 2. Tensile Strength N/mm² (ASTM D412-2016): 3.3 3. Specific Gravity: 1.02 ± 0.02 4. Total Solids (ASTM D1644-2012): 43.98 5. Hardness Shore A (ASTM D2240-2015): 82 It shall be applied as per manufacturer's specification.	As directed by Engineer in charge	Square Metre	409.00	157.00
2069	Waterproofing	52.29		Providing & mixing liquid internal curing compound which is based on water soluble oxyethylene polymer (OEP) for RCC, Shotcrete, mortar. The liquid shall be conforming to AS 3799 -1998 for curing efficiency not less than 90% & capable of improving workability, pumpability, impermeability, full hydration of all types of cement essential for optimum strength development. The dose of liquid shall be average 1.25 % by weight of cement. The liquid is to be mixed with gauging water while mixing the concrete/mortar/shotcrete.	As directed by Engineer in charge	Litre	517.00	49.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2070	Waterproofing	52.30		Clean the existing surface / terrace thoroughly to remove dirt, loose particles, laitance etc. For emergency waterproofing of existing terrace. Use a vacuum cleaner or high pressure jet or wire brushing as per requirement. Examine the surface closely for any cracks. Fill it with acrylic polymeric non-shrink crack filler putty as approved by Engineer in charge a pure aliphatic, acrylic, polymer modified ready to use paste. After filling, allow the surface to dry for atleast 24 hrs. If the depth of the crack is more than 2-3 mm apply in layers at intervals. Moisten the surface with a water jet one day prior to the application of waterproofing coating. Mix 1 part of 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) membrane as approved by Engineer in charge and 1 part of grey cement by weight using a low speed mechanical stirrer to form slurry lump free consistency. Apply this as a primer coat of 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) membrane as approved by Engineer in charge. Apply the same slurry by roller at 24 hrs interval between the applications of each coat. Extend the coating to parapet walls. Allow the primer coat to set for 24 hrs. After the primer coat is set, apply two coats of pure enoate based polymer titanium dioxide based 2-(methoxycarbonyl)-1-propene-butyl-2 propenoate (TMPBP) and 2-(methoxycarbonyl)-1-propene-Butyl-2 propenoate (MPBP) of waterproof coating as approved by Engineer in charge on surface. Ensure that no pinholes are let untouched. Allow the membrane to cure for 24-48 hours. Single Component, UV Resistant, Elastomeric, High Build Waterproof Coating (Confirming to DIN 1048) should have following minimum properties: 1) Elongation % (ASTM D 638): @ 400% 2) Tensile Strength (ASTM D 412): 150 psi 3) Water Permeability (DIN 1048): Zero 4) Solids: > 65% 5) pH: 8.5 - 10.5	As directed by Engineer in charge	Square Meter	703.95	194.62

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2071		52.31		Providing Water proofing treatment to old terraces by removing existing treatment, sealing of cracks by non shrink crack fill compound applying first coat of polymer modified semi-viscous paste prepared by mixing polymer of approved make and Cement in 1 : 2 proportion (1 litre polymer : 2KilogramCement)or Rohnex water proofing system in two coats(1Kilogram powder,700 ml water and polymer jelly for first coat & 1Kilogram powder,500 ml water & polymer jelly for second coat) to a neatly cleaned and dust free concrete surface and upto 300 mm over parapet wall prepared by removing loose and deposited material with brush and water, followed by two coat of flexible cementious coating of approved make after laying glass fibre mesh of 10 x 10 specification of approved make over tacky surface of first coat of polymer followed by second coat in transverse direction, sprinkling coarse sand over it, followed by protective mechanical cover of 40 mm to 75 mm. thick cement concrete of 1:2:3 proportion using coarse aggregate of 10 MSA and water proofing compound of approved make along with 14 guage 40 mm x 40 mm size welded mesh and and polypropylene fibres @ 125 gm per bag of cement within it conforming to IS in pannels of 3m/4m or as per site condition & filling the joints with polt sulphide sealant(0.12Kilogramper sq.mt.) after curing, including providing holler with drip moulds at the junction and finishing the concrete surface with neat cement slurry including curing as directed and ponding the surface as directed etc. complete; covering 10 years guarantee against leakproofness on Court Fee Stamp Paper of Rs. 100/-	As directed by Engineer- in-charge.	Square Meter	1909.00	244.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2072		52.32		Providing water proofing treatment to newly laid fully cured concrete slab of terraces by applying first coat of polymer modified semi - viscous paste prepared by mixing polymer of approved make (such as Master Seal 550 / brush bond/ RoffSupercrete /Webercrete /Monobond / Perma shield / Hypercrate / Master Crete M 81) and Cement in 1:2 proportion (1 litre polymer : 2KilogramCement)or Rohnex water proofing system in two coats(1Kilogram powder,700 ml water and polymer jelly for first coat & 1Kilogram powder,500 ml water & polymer jelly for second coat) to a neatly cleaned and dust free concrete surface and upto 300 mm over parapet wall prepared by removing loose and deposited material with brush and water, laying glass fibre mesh of 10 x 10 specification of approved make over tacky surface of first coat of polymer followed by second coat in transverse direction, laying mechanical protective cover to polymer coating treatment with brick bat coba with burnt broken brick bats laid in C.M. 1:5 admixed with approved water proofing compound filling up to half depth of brick bats, curing this layer for 3 days, applying cement slurry over this layer, joints of Brick Bats with C.M. 1:3 admixed with approved water proofing compound and finally top finishing with average 20mm thick layer of same mortar added with polypropylene fibers at 125 gm per bag of cement including finishing the surface smooth with neat cement slurry admixed with approved water proofing compound, Marking finished surface by false squares of 300 mm x 300 mm, Making the junctions at the parapet rounded and tapered top for required height, with drip mould at the junction of plaster and parapet and curing and covering 10 years Guarantee against leakproofness on court fee stamp paper Rs. 100/- including ponding test etc. complete	As directed by Engineer in Charge	Square Meter	1214.00	199.00
2073		52.33		Providing Grouting by specially prepared grout of Weber Crete/Roff Supercrete/Polyalk WP/Monobond/Perma shield/Hypercrate or equivalent with cement in proportion 1:3.5 (1 part chemical & 3.5 part cement by weight) along with 50 ml super plasticizer Roff Plast 320/sun polycrcrete NCT/Perma Plast/Supercon 100 or non shrinking, non cracking antiwash high strength polymer cement grout P C grout available in bags or equivalent with proper water for injectable consistency and applying it in the body of structure like slab, beam, column, pillars, deckslab, retaining wall, basement, underground and elevated water storage reservoir concrete and brick wall, crack portion of structure etc. by injecting method, to achieve its original strength including drilling of suitable diameter drills holes at 2 to 4 Nos. per Square Metre. using caps and nozzle grouting machinery necessary, scaffolding, finishing and covering guarantee of 10 years on court stamp paper of Rs. 100/- and necessary testing etc. complete. (Prior permission of S.E. in writing is necessary before inclusion of this item in estimate)	As directed by Engineer In Charge	Kilo Gram	392.00	79.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2074	Bridge repair	52.34		For all concrete New / Repair of RCC / PSC Bridges using migrating, non-nitrite based corrosion inhibiting admixture as approved by Engineer in charge at a dose of 3Kilogramper cum of concrete. The admixture should protect both cathodic and anodic sites and has been recommended for use by Ministry of Road Transport & Highways and should have a 8 year track record of use in both abroad and India. Admixture should have evaluated test reports demonstrating a corrosion rate of zero coulombs after 9 test cycles and less than 2000 coulombs as per ASTM G 109 when tested from a research institution NBA accredited Grade A and internationally ranked among top 5 research institutions in the world in Annual Survey conducted by Georgia Institute of Technology ranking of research institutions. PH of admixture should be alkaline in nature and is based on Polyalkalene polyamines with specific gravity of 0.99 - 1.1 brownish colour. The contractor must intimate the engineer in charge prior to addition in concrete for recording. If the admixture is put in the concrete mix at the batching plant, a written record of the amount of admixture used shall be supplied to the engineer. The engineer must ensure that the specified dosage of admixture is added in the concrete mix. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	210.00	0.00

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2075	Bridge repair	52.35		For Strengthening of concrete RCC, PSC bridges including piers, girders, deck slabs etc. Execute the work as follows. Remove dust, laitance, grease, oil, curing compounds, waxes, foreign particles, coatings and disintegrated materials by mechanical means (i.e., blast cleaning). Empty entire pre-packed and pre-weighed contents of 'B' Component into pail containing 'A' Component. Mix for 30 seconds with a low speed stirrer. (400-600 rpm). After proper mixing of component 'A' and 'B', now empty entire pre-packed and pre-weighed part 'C' component into the mix and using a mechanical stirrer mix all the components for 1-3 minutes with a low speed stirrer (400 to 600 rpm). Caution: Mix only that limited quantity which can be placed within the pot life. Material should be quickly brushed/ poured from pail onto concrete surface to obtain prolonged working life. Inspect the underside for evidence of full depth cracks that may require additional treatment to prevent draining of the resin. Cracks greater than 1/8" width should be repaired individually. Fill 1/8" or larger cracks with loose sand and pour small quantity of mixed 2-(methoxycarbonyl)-1-Propene Resin Sealer Cum Grout as approved by Engineer in charge into the crack, allow to cure. The above Material is spread evenly on the surface as a flood coat with a squeegee or rollers on horizontal and vertical surfaces and allowed to absorb completely into the concrete substrate. Drill injecting holes to a depth of 2 - 4" in concrete depending upon the width of crack, extent of damage and dimension of structural element. Fix the grouting nozzle and inject the mixture of 2-(methoxycarbonyl)-1-Propene Resin Sealer Cum Grout at pressure of 50 - 100 psi. (Rate for fixing nozzle is not included in this item). Low Viscosity, Transparent, Three Component, 2-(methoxycarbonyl)-1-Propene Resin Sealer Cum Grout should have following minimum properties:	As directed by Engineer in charge	Kilo Gram	1790.28	855.61
				1. Viscosity: < 5 cps 2. Flexural Strength (ASTM D-790): 1 day - 17.2 MPa 3. Bond Strength (ASTM C-882): 2 days - 14.4 MPa (Dry Cure); 14 days - 15.8 MPa (Moist cure) 4. Volume Solids %: ~100 It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item) (Coatings and Grouting Items shall be separate)				

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2077	Bridge repair	52.37		Cleaning the existing steel surface by mechanical means such as sand blasting so as to remove all the existing loose rust etc. Using cotton waste swab and apply Rusticide as approved by Engineer in charge rust converting, steel passivating, flash rust preventing sulphate and chloride free, non-alkaline, inorganic single component, and nano film forming surface passivator (conforms to IS 9077-1979 (reaffirmed 1997) App. B Cl. 5.3.3 for procedure). After 24 hours remove the free / loose rust particles by simple dusting with brush. Providing and applying one coat of Two component, anti-corrosive, solvent free, substituted long chain nylon reticulant based coating/primer LCNR as approved by Engineer in charge. This should be followed by two coats of protective two component, acrylic polyisocyanate reticulant based, UV resistant anticorrosive coating of APR as approved by Engineer in charge. Apply the coats by brush or spray at 4-6 hours interval between each coat. Two Component, Air Drying, Acrylic Polyisocyanate Reticulant (APR) based Coating should have following properties: 1. Volume Solids: 40 ± 3% (Depending upon shade) 2. Adhesion (ASTM D 4541): > 500 psi (Concrete Failure) 3. Impact Resistance (ASTM G 14): 25 - 30 J 4. Conformance: IS 13213 5. Dry Film Thickness/Coat: 40-50 microns at recommended coverage It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Square Metre	618.64	147.42
2078	Bridge repair	52.38		Remove loose, disintegrated and porous concrete at cracks and joints. Repair the same with epoxy or polymer modified mortar. Drill injecting holes to a depth of 2-4 inches in the concrete depending upon width of cracks, extent of damage and dimension of structural elements. Fix the grouting nozzles. Clean all loose dust particles from the cracks and holes by blowing compressed air through all the nozzles in succession. Mix and place Polyurethane Based Leakage Sealing Grouting as approved by Engineer in charge. Mix one batch at a time using a bucket and drill connected to a stirrer. Polyurethane Based Leakage Sealing Grouting by using PU Foam Grout should have following minimum properties: 1. Viscosity @ 25°C: 1300 ± 400 cps 2. Specific Gravity: 1.16± 0.05 It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	2467.83	579.01

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2079	Bridge repair	52.39		It is ready to use inorganic, bio compatible, low viscosity, non hazardous, soil stabilizing two component colloidal silica base chemical grout. Providing and carrying out this grouting to stabilize the strata above the tunnel, foundations, cutting slope stabilization and sub structures by using ultimate fine Nano grout as approved by Engineer in charge. Drill injecting holes to required depth in loose soil strata. Fix the grouting pipes. Grout must be continuously stirred during addition of accelerator and fully mixed to transparent solution prior to grouting into the soil/strata. No white precipitates should remain in the grout mix. This is ultimate fine grouting can be completed by Nano grout. Solvent Free, Inorganic, Hydrophilic, Non-hazardous, Low Viscosity Chemical Grout for Stabilization and Consolidation of Sandy/Silty Soil should have following minimum properties: Grout: (Rate for fixing nozzle is not included in this item). 1) Specific Gravity: 1.2 ± 0.1 2) pH: 11.3 ± 0.1 3) Viscosity in B4 Ford cup at 28°C: 12-15 sec Accelerator: 1) Specific Gravity: 1.07 ± 0.01 2) pH: 7.0 ± 0.1 3) Viscosity in B4 Ford cup at 28°C: 10-12 sec Sungeogrout Mix: 1) Specific Gravity: 1.2 ± 0.1 2) Viscosity in B4 Ford cup at 28°C: 12-15 sec It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	560.65	289.50

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2080	Bridge repair	52.40		Removing loose rust from the reinforcement bars by wire brushing, light hammering etc. and applying sulphate and chloride free inorganic single component rust remover Rusticide as approved by Engineer in charge conforming to IS 9077. The rusted surface shall become blackish non rusted colour. After 24 hours of application of rust remover, loose particles shall be removed by brush. Apply one more coat of Rusticide. Apply bonding coat slurry of high performance acrylic polymer - Methyl 2-methylpropenoate copolymer with another enoate as approved by Engineer in charge on entire surface. Mix 1Kilogramof acrylic polymer with 0.5Kilogramof cement. Finish it with ready to use repair polymer modified mortar based on special cements, aldehyde based polymers with thixotropy modifying agents as approved by Engineer in charge (The Polymer Modified Mortar (PMM) should attain min. compressive strength of 20 N/mm2 in 1 day and 30 N/mm2 in 7 days) by adding 13 - 16% water by weight of polymer modified mortar for treatment to the damaged RCC members. Add 1Kilogramof Migrating Corrosion Inhibiting Admixture as approved by Engineer in charge per 25Kilogramof polymer modified mortar. After mixing polymer modified mortar, it can be trowel applied or sprayed. When applying by hand, polymer modified mortar must be forced tightly into the substrate to ensure complete contact with the substrate. (If scaffolding is required, same shall be provided and will be paid under relevant item) (Upto 15 mm thickness at a time).	As directed by Engineer in charge	Square Metre	2113.48	355.85
2081	Bridge repair	52.41		Removing loose rust from the reinforcement bars by wire brushing, light hammering etc. and applying sulphate and chloride free inorganic single component rust remover Rusticide as approved by Engineer in charge conforming to IS 9077. The rusted surface shall become blackish non rusted colour. After 24 hours of application of rust remover, loose particles shall be removed by brush. Apply one more coat of Rusticide. Apply bonding coat slurry of high performance acrylic polymer - Methyl 2-methylpropenoate copolymer with another innovate as approved by Engineer in charge on entire surface. Mix 1Kilogramof acrylic polymer with 0.5Kilogramof cement. Finish it with ready to use repair polymer modified mortar based on special cements, formaldehyde based polymer with thixotropy modifying agents as approved by Engineer in charge (The Polymer Modified Mortar (PMM) should attain min. compressive strength of 20 N/mm2 in 1 day and 30 N/mm2 in 7 days) by adding 13 - 16% water by weight of polymer modified mortar for treatment to the damaged RCC members. Add 1Kilogramof Migrating Corrosion Inhibiting Admixture as approved by Engineer in charge per 25Kilogramof polymer modified mortar. After mixing polymer modified mortar, it can be trowel applied or sprayed. When applying by hand, polymer modified mortar must be forced tightly into the substrate to ensure complete contact with the substrate. (If scaffolding is required, same shall be provided and will be paid under relevant item) (15-30 mm thickness at a time).	As directed by Engineer in charge	Square Metre	1423.86	171.12

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2082	Bridge repair	52.42		Providing and fixing zinc alloy based galvanic disk type sacrificial anodes (50 mm dia, 18 mm thick) as approved by Engineer in charge to the reinforcement, that should have a 3 year track record of use in PWD projects, 4 year track record in corrosive region of abroad and pass 500 hours salt spray test as per ASTM B 117. The anode shall be connected to the reinforcement steel by connectors provided with the anode. Sacrificial Galvanic Anode should have following minimum properties: 1. Base: Zinc Alloy 2. Conformance: ASTM B 418 Type II 3. Zinc Mass: Min 40 g per anode 4. Geometry: Disc Type 5. Diameter: 50 mm 5. Height: 18 mm 6. Surface Area: 6751 sq mm It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	1072.57	28.73
2083	Bridge repair	52.43		Rake out loose pointing mortar material atleast upto 50 mm in depth and clean with using a nylon brush or low-pressure compressed air. It may require more depth some times depending upon the loss of integrity of existing mortar. Care is to be taken that the adjacent good and sound matrix is not disturbed. Provide anti-rooting treatment to entire recessed pointed area. Clean the joint area properly and pointing shall be done with High Viscosity having special thixotropic chemicals along with long chain nylon reticulent (LCNR) Epoxy Resin Mortar as approved by Engineer in charge. Mix 2KilogramResin + 1KilogramHardener + 9-12KilogramQuartz Sand (Graded) thoroughly to homogeneity using a slow speed (300-500 rpm) flame proof or air driven drill fitted with a mixing attachment. Hand press this mortar in the joint and finish the surface and allow the mortar to set for minimum 24 hours. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	R. Mtr.	64.79	30.24

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2084	Bridge repair	52.44		Rake out loose pointing mortar material from the joints of the heritage stone masonry atleast upto 50 mm in depth and clean the same by using a nylon brush or low-pressure compressed air. It may sometimes require more depth depending upon the loss of integrity of existing mortar. Care is to be taken that the adjacent good and sound matrix is not disturbed. Provide anti-rooting treatment to entire recessed pointed area. Clean the joint area properly and pointing shall be filled with a special mix of lime base hydraulic mortar and water for masonry with highly sulphate resistant cement and silica aggregates as approved by Engineer in charge. This lime based mortar is based on special limes with thixotropic agents, aldehyde based polymer and selected sands having high abrasion resistance. Hand press this mortar in the joint and finish the surface and allow the mortar to set for minimum 24 hours. Mortar should have Compression Strength of Appr. 10 N/mm ² . (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	R. Mtr.	432.11	289.50
2085	Bridge repair	52.45		Remove loose, disintegrated and porous concrete at cracks and joints. Repair the same with epoxy or polymer modified mortar. Drill injecting holes to a depth of 2 - 4 inches in the concrete depending upon width of cracks, extent of damage and dimension of structural elements. Fix the grouting nozzles. Clean all loose dust particles from the cracks and holes by blowing compressed air through all the nozzles in succession. Whenever required grouting nozzle can be introduced for subsequent cementitious lime grout which is based on special limes with thixotropic agents, aldehyde based polymer and selected sands having high abrasion resistance by using Lime based Hydraulic Injection Suspension as approved by Engineer in charge. Before injecting the grout, it is advisable to make sure the nozzles are free of dust. Care is to be taken that the air pressure is monitored and maintained so as not to damage the matrix. Mix cementitious lime based hydraulic ready to use - Hydraulic Injection Suspension with 35 - 45% water by its weight in clean container using a low speed air driven mixer / stirrer to form a mix of uniform and flowable consistency. Depending on temperature, the water demand may vary. Lime based Hydraulic Injection Suspension should have following properties: 1. Bulk Density: 1.8 ± 0.2 2. Compressive Strength (28 days): W/P (0.45) - Appx. 10 Mpa. It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	432.11	289.50

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2086	Bridge repair	52.46		Remove roots of the plant from joints of the stone masonry manually. Make sure that no part of the root has remained inside the masonry. Pour thiazolinones based Microbial Wall Wash and Anti-rooting Solution as approved by Engineer in charge in the Stone Masonry joints depending upon width of roots, extent of damage and dimension of roots of plant. For wider roots, it is necessary to first drill the holes in the bark from all the sides which should subsequently totally filled with Microbial Wall Wash and Anti-rooting Solution so that the same percolate in the bark. On complete absorption of the liquid, refill and the process must be continued atleast 5 - 6 times, if necessary. Microbial Wall Wash and Antirooting Solution should have following properties: 1. pH (5 % Solution): 6 - 8 2. Specific Gravity @ RT: 1.05 ± 0.02 It shall be applied as per manufacturer's specification. (If scaffolding is required, same shall be provided and will be paid under relevant item)	As directed by Engineer in charge	Kilo Gram	744.26	289.50
2087	Road Surevy	52.47		Visits (minimum 2) to site of Bridge/Bandhara of length upto 100 m by Expert/Professional Consultant, noting the broad features like span, height, type of foundation, special features specific to the site to come to the conclusion of adopting standard design & drawing, checking suitability of site, finalizing site for construction of Bridge/Bandhara and submitting the observation note accordingly to Department. (Transporation from Regional Head quarter to actual site and accomodation at site / Taluka head quarter / District Headquarter is not included in this item and it shall be paid separately wherever necessary.)	As directed by Engineer in charge	Per Site	25000.00	

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2088	Road Surevy	52.48		Taking longitudinal section of stream extending 1.20 km on upstream side of the bandhara site, requisite number of cross sections (minimum 3) of the stream on upstream side, taking bed slope of stream and other details, taking 3 trial pits 1.00 m x 1.00 m x 3.00 m, plotting details of stratification indicating type of soil/rock, preparation of detailed survey data including preparation of hydraulic design including calculations for afflux, height of the weir and storage capacity of bandhara etc., obtaining the village map and studying the land width of nalla, make a preliminary assessment of likely storage of nalla with nalla training as per width shown in village map, marking on village map the locations of existing wells, bore wells within radius of 1.5 km and also depth of water and borewell depth, identifying the maji malgajari tanks or other lakes owned by Govt. within radius of 3 km, assessing the radial distance and plan area as per village map, preparing detailed plans referring the std. design & drawing and preparing detailed estimate as per approved SSR in 3 copies and submitting the project duly typed along with relevant drawings in hard and soft copies in CD / Pen Drive etc. as required by the Department.	As directed by Engineer in charge	No	126012.00	
2089	Drone survey	52.49		To carry out linear Drone survey agencies will use fully autonomous professional survey grade drone and in post process for aerial triangulation required ground control points and benchmarks will be collected by using survey grade dual frequency DGPS-PPK system. After post processing agency will deliver following final output. 1.Geotagged images in JPG format with resolution of 4-5cm/pixel with 70% overlap 2. GCP values in .CSV format. 3. 3D point cloud cover in .las format. 4. digital surface model (DSM) in .tiff format. 5. 2D orthorectified images in .tiff format with 5 cm resolution which gives capability to capture detailed features. For Linear UAV Survey	As directed by Engineer in charge	Running kilometre	8500.00	

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2090	Drone survey	52.50		To carry out polygon Drone survey agencies will use fully autonomous professional survey grade drone and in post process for aerial triangulation required ground control points and benchmarks will be collected by using survey grade dual frequency DGPS-PPK system. After post processing agency will deliver following final output. 1.Geotagged images in JPG format with resolution of 4-5cm/pixel with 70% overlap 2. GCP values in .CSV format. 3. 3D point cloud cover in .las format. 4. digital surface model (DSM) in .tiff format. 5. 2D orthorectified images in .tiff format with 5 cm resolution which gives capability to capture detailed features. For Polygon UAV Survey	As directed by Engineer in charge	Running kilometre	22900.00	
2091	Building Maintaence	52.51		Providing and spraying liquid mixture of potable water and 'STINK OFF' (enzyme-based odour removing powder) on the areas such as toilet blocks, urinals area, garbage depot, solid waste dumping yard, solid waste treatment plants, hospitals, any area with unpleasant smell shown by Engineer in charge with spray gun of required capacity, the liquid mixture shall be prepared as directed by manufacturer as 4.00 grams of STINK OFF in 1.00 liter of potable water, to be mixed at least 6.00 hours before use, etc. complete.	As directed by Engineer in charge	Squre Meter	4.00	
2092	Road Furniture new item	52.52		Supplying and fixing G.I.. Pipe 65 mm diameter heavy type drilled on top and painted with one coat of epoxy primer and two coats of epoxy finish paint having black and white bands of 25 cm, last part of the post 0.75 mt. below ground level is painted with three coats of red lead paint with two number of high tensile G.I. bolt and nut of size 10 mm die of 25 mm long including transportation etc. complete.	As directed by Engineer in charge	Running Meter	1401	174
2093	Road Furniture new item	52.53		Supplying and fixing G.I.. Pipe 50 mm diameter heavy type drilled on top and painted with one coat of epoxy primer and two coats of epoxy finish paint having black and white bands of 25 cm, last part of the post 0.75 mt. below ground level is painted with three coats of red lead paint with two number of high tensile G.I. bolt and nut of size 10 mm die of 25 mm long including transportation etc. complete.	As directed by Engineer in charge	Running Meter	1241	174

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2094	Road Furniture new item	52.54		Kerb stone / vertical surface painting with Kataline make Grade 1 (as per IS 164) water based acrylic paint,preferably mechanical application for one coat priming coat and 1 uniform Retro reflective finish coat in required colour. Yellow Retroreflective coat shall be Bright Yellow during night with minimum Rl(dry) > 375 mcd / m2 / lux and Rl (wet) > 200 mcd / m2 /lux and White Retroreflective Coat shall be Bright White during night with minium Rl(dry) > 450 mcd / m2 / lux and Rl(wet) > 250 mcd / m2 / lux .Cleaning of the surface thoroughly by removing flakes,dust deposits, vegetation growth,pasted paper etc., using coir / coil brush,so as to enable the application of respective primer etc.	As directed by Engineer in charge	Square Meter	1207	44
2095	Partition	52.55		Medium Height Partition @ 1800/1200HT TILE BASED PARTITION SYSTEM Tile based Aluminum partition system of 1800/1200mm ht. made of 60mm thick aluminum frames having two separate race ways for laying electrical & computer wiring. The wire management shall be through to the race way to be fitted at bottom of partition other immediately below of work top with hook on type raceway cover for easy access of wires. Frames to be joined by aluminum connectors with M6 x 16 pan-head machine screw and washer with aluminum post cover. Post cover snap on fashion to be connected on aluminum connector visible aluminium to be in anodized / powdercoated finish. The top exposed sides of the frame and posts should be covered with horizontal/ Vertical trim and caps made of Aluminum in anodized / powdercoated finish in order to enhance its look.Upper tiles on the partition to be in Soft Board or Marker or prelaminated partical board tile of 9mm. thk., prelaminated partical board lower tiles in laminate finish 9mm. thk. on both the sides .Size :- 1200/1800mm (H)	As directed by Engineer in charge	Square Metre	5741	0
2096	Partition	52.56		Full Height Partitions in Solid finish Providing and Fixing 80mm to 85mm thick Full height Double Skin partition up to 3 mtr height with All visible sections in Anodized / Powdercoated finish. Made up of Frames and Tiles. Frame construction In combinaton of Aluminium Rails and Bottom ,Center and Top members, Connected with 2 way Round Shape Post , 3way Post , 4 way Post made up of Aluminium Extruded and Tiles in 9mm thk. Prelaminated Partical Board of on both side. With all the Joints in the partitions covered with PVC extrusions to provide better sound Proofing. Tiles to be separated 55mm from each other to provide adequate space for drawing cables for electric, data and telephone with proper facility for fixing electrical and data switch plates. as per design and drawing.	As directed by Engineer in charge	Square Metre	6459	0

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2097	Partition	52.57		Full Height Partitions in Glass finish Providing and Fixing 80mm to 85mm thick Full height Double Skin partition up to 3 mtr height with All visible sections in Anodized / Powdercoated finish. Made up of Frames and Tiles. Frame construction In combinaton of Aluminium Rails and Bottom ,Center and Top members, Connected with 2 way Round Shape Post , 3way Post , 4 way Post made up of Aluminium Extruded and Tiles in 5mm thk. Non Toughened Glass on both side. With all the Joints in the partitions covered with PVC extrusions to provide better sound Proofing. Tiles to be separated 55mm from each other to provide adequate space for drawing cables for electric, data and telephone with proper facility for fixing electrical and data switch plates. as per design and drawing.		Square Metre	7894	0
2098	Door	52.58		Providing and fixing Factory made 31mm ABS Plastic Door made of abs plastic moulded sheet of 1.5 mm thickness P.U. foam insulated of density 40 kg per cubic meter with seasoned wood to fit lock and hardware covered with aluminium 'A' section of 31mm x 27mm x27mm x 1.5mm thick powder coated and fitted with PVC ' L' Corner of dimension 75mm x75mm x 10mm thick on all four sides including all labour, material,stainless steel fixtures and fastening etc complete	3627	Square Metre	3627	495
2099	Lamination	52.59		Providing and fixing 4mm thick High Pressure interior compact Laminate made out of thermosetting resgin treated Kraft as core material and design paper as a finish surface. Compact laminates should have the characteristic of flame retardant fulfilled the criteria of under BS-476/97 and EN438-6 with classification of BS1D0 standard property, Anti bacterial and anti-termite property under JIS Z2801:2000, Chemical resistance, Scratch resistant ,fire resistance, weather & climatic shock resistance(The manufacturer should provide10 years warranty certification on any manufacturing and moisture related defects.)The compact laminates should be resistance to water immersion through permissible increase on thickness and mass <0.60% and board should have density >1.35kg/cm3 and fulfilled the criteria of FSCand Green Guard Gold certification and manufactured under EN438-2&3:2005 standard . Finish and colour of compact laminates should be finalised under direction of Engineer –in-charge.Including fixing Compact laminates on 25x50mm aluminium tube or approved tube size at 600mm c/c under desirable height and fixed through same compact colour rivets or compact adhesive as per recommended by compact supplied agency. Finish and colour of Interior clade should be approved under engineer-in-charge direction.	As directed by Engineer in charge	Square Metre	3933	798

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2100	Lamination	52.60		Providing and fixing 6 mm thick High Pressure interior compact Laminate made out of thermosetting resin treated Kraft as core material and design paper as a finish surface. Compact laminates should have the characteristic of flame retardant fulfilled the criteria of under BS-476/97 and EN438-6 with classification of BS1D0 standard property, Anti bacterial and anti-termite property under JIS Z2801:2000, Chemical resistance, Scratch resistant ,fire resistance, weather & climatic shock resistance(The manufacturer should provide 10 years warranty certification on any manufacturing and moisture related defects.)The compact laminates should be resistance to water immersion through permissible increase on thickness and mass <0.60% and board should have density >1.35kg/cm ³ and fulfilled the criteria of FSC and Green Guard Gold certification and manufactured under EN438-2&3:2005 standard . Finish and colour of compact laminates should be finalised under direction of Engineer –in-charge. including fixing Compact laminates on 25x50 mm aluminium tube or approved tube size at 600 mm c/c under desirable height and fixed through same compact colour rivets or compact adhesive as per recommended by compact supplied agency. Finish and colour of Interior clade should be approved under engineer-in-charge direction.	As directed by Engineer in charge	Square Metre	4605	798

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
SSR 2020-21 REBARING WORKS								
2101	Rebar	53.01	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -8mm dia 160mm depth	Bd.C.2 Page No. 275	Number	243	19
2102	Rebar	53.02	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -10 mm dia 200mm depth	Bd.C.2 Page No. 275	Number	436	19

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2103	Rebar	53.03	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -12 mm dia 240mm depth	Bd.C.2 Page No. 275	Number	541	19
2104	Rebar	53.04	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -16 mm dia 320mm depth	Bd.C.2 Page No. 275	Number	791	21
2105	Rebar	53.05	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -20 mm dia400mm depth	Bd.C.2 Page No. 275	Number	1179	23

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2106	Rebar	53.06	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -25mm dia 500mm depth	Bd.C.2 Page No. 275	Number	3285	48
2107	Rebar	53.07	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved RE500V3 chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. Re 500 -32mm dia 640mm depth	Bd.C.2 Page No. 275	Number	6240	64
2108	Rebar	53.08	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved HY-200-R chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. HY20 -8mm dia 160mm depth	Bd.C.2 Page No. 275	Number	218	19

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2109	Rebar	53.09	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved HY-200-R chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. HY200 -10 mm dia 200mm depth	Bd.C.2 Page No. 275	Number	392	19
2110	Rebar	53.10	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved HY-200-R chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. HY200 -12 mm dia 240mm depth	Bd.C.2 Page No. 275	Number	480	19
2111	Rebar	53.11	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved HY-200-R chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. HY200 -16 mm dia 320mm depth	Bd.C.2 Page No. 275	Number	663	21

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2112	Rebar	53.12	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved HY-200-R chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. HY200 -20 mm dia400mm depth	Bd.C.2 Page No. 275	Number	892	23
2113	Rebar	53.13	BDC 2	Supplying, Drilling/Cleaning hole and injecting Hilti make ETA Approved HY-200-R chemical. Application to be designed separately for Rebars as Simply Supported, Moment or Splice Connection as per EC2/TR 023 or relevant tested and accepted rebar guidelines. The chemical should have ETA approval for seismic rebar as a minimum qualifying criterion. Drilling hole with double flute type drill bits or hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate diameter and embedment of rebars to be decided as per PROFIS Rebar Software & the report to be submitted to the project manager/ design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. HY 200 -25mm dia 500mm depth	Bd.C.2 Page No. 275	Number	2240	75

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2114	Rebar	53.14	BDC 2	Providing and supplying HIT-RE500V3 with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked concrete, tested for service temperature of -40 deg. C to +80 deg. C. The chemical should have an ETA approval for 100 years age testing. Anchoring with HIT-V with RE500V3 to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/ hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor RE500V3 + HIT M10 x 125mm	Bd.C.2 Page No. 275	Number	209	14
2115	Rebar	53.15	BDC 2	Providing and supplying HIT-RE500V3 with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked concrete, tested for service temperature of -40 deg. C to +80 deg. C. The chemical should have an ETA approval for 100 years age testing. Anchoring with HIT-V with RE500V3 to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/ hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor RE 500V3+HIT M12x1500	Bd.C.2 Page No. 275	Number	279	14

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2116	Rebar	53.16	BDC 2	Providing and supplying HIT-RE500V3 with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked concrete, tested for service temperature of -40 deg. C to +80 deg. C. The chemical should have an ETA approval for 100 years age testing. Anchoring with HIT-V with RE500V3 to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/ hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor RE 500V3+ HIT M16x185	Bd.C.2 Page No. 275	Number	513	14
2117	Rebar	53.17	BDC 2	Providing and supplying HIT-RE500V3 with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked concrete, tested for service temperature of -40 deg. C to +80 deg. C. The chemical should have an ETA approval for 100 years age testing. Anchoring with HIT-V with RE500V3 to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/ hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor RE 500V3+ HIT M20x240	Bd.C.2 Page No. 275	Number	1022	17

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2118	Rebar	53.18	BDC 2	Providing and supplying HIT-RE500V3 with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked concrete, tested for service temperature of -40 deg. C to +80 deg. C. The chemical should have an ETA approval for 100 years age testing. Anchoring with HIT-V with RE500V3 to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/ hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor RE 500V3+ HIT M24x300	Bd.C.2 Page No. 275	Number	2743	30
2119	Rebar	53.19	BDC 2	Providing and supplying HIT-HY200R with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked/un-cracked concrete. Anchoring with HIT-V with HY200R to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor HY200 + HIT M10x125	Bd.C.2 Page No. 275	Number	184	14

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2120	Rebar	53.20	BDC 2	Providing and supplying HIT-HY200R with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked/un-cracked concrete. Anchoring with HIT-V with HY200R to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor HY200+HIT M12x150	Bd.C.2 Page No. 275	Number	275	14
2121	Rebar	53.21	BDC 2	Providing and supplying HIT-HY200R with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked/un-cracked concrete. Anchoring with HIT-V with HY200R to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor HY200+ HIT M16x185	Bd.C.2 Page No. 275	Number	476	14

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2122	Rebar	53.22	BDC 2	Providing and supplying HIT-HY200R with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked/un-cracked concrete. Anchoring with HIT-V with HY200R to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor HY200+ HIT M20x240	Bd.C.2 Page No. 275	Number	958	17
2123	Rebar	53.23	BDC 2	Providing and supplying HIT-HY200R with HIT-V Threaded Rod. The product should be approved by ETA, ICC, CSTB, COLA, BZS with Shock approval, Seismic (C1 & C2) approval, Fatigue and Fire Approvals in anchors to use in cracked/un-cracked concrete. Anchoring with HIT-V with HY200R to be designed as per guidelines of TR 029. Drilling hole with double flute type drill bits/hollow drill bits to the required depth by rotary hammer drill, cleaning with brush and jet of clean air, filling resin and hardener using serrated nozzle to eliminate mixing error with standard HDE A22 battery dispenser along with piston plug. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The adequate embedment depth & number of anchors to be calculated as per PROFIS Anchor Software & the report to be submitted to the project manager, design engineer for approval. Scanning before drilling to be done to avoid hitting existing rebars. For zones with high seismicity, seismic designs are mandatory. For shear loads, base plate designed by SOFA, filling sets are mandatory. Anchor HY200+ HIT M24x300	Bd.C.2 Page No. 275	Number	2898	321

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2124	Rebar	53.24	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 M8x95-30	Bd.C.2 Page No. 275	Number	149	7
2125	Rebar	53.25	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 SS M8x95-30	Bd.C.2 Page No. 275	Number	379	7

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2126	Rebar	53.26	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 M10x110-30	Bd.C.2 Page No. 275	Number	224	7
2127	Rebar	53.27	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. studanchorHST3 SS M10x110-30	Bd.C.2 Page No. 275	Number	467	7

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2128	Rebar	53.28	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 M12x115-20	Bd.C.2 Page No. 275	Number	238	7
2129	Rebar	53.29	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 SSM12 x 115-20	Bd.C.2 Page No. 275	Number	716	7

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2130	Rebar	53.30	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 SS M8x95-30	Bd.C.2 Page No. 275	Number	464	7
2131	Rebar	53.31	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 SS M16x145-45	Bd.C.2 Page No. 275	Number	1112	9

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2132	Rebar	53.32	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. Safety stud anchor HST3 M20x170	Bd.C.2 Page No. 275	Number	785	11
2133	Rebar	53.33	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 SS M20x170	Bd.C.2 Page No. 275	Number	2581	11

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
3134	Rebar	53.34	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 M24x200 30	Bd.C.2 Page No. 275	Number	144	38
3135	Rebar	53.35	BDC 2	Supplying, drilling/cleaning hole and fixing of HILTI Torque Controlled Expansion Anchor HST3, of sizes ranging from M8 to M24. The Anchor should be third party tested, possess ETA approval and should be pre-assembled with a galvanized bolt as per EN ISO 4042: 1999, ingenious expansion sleeve M10 and M16 (galvanized) and M8, M12, M20, M24 - Stainless Steel (EN ISO 4042: 1999), a nut of Strength Class 8 (EN ISO 20898-2:2012) and a galvanized washer (EN ISO 4042:1999). The anchor should be approved for use in Cracked Concrete. Anchor must be tested and approved as per Seismic C1 and C2 Category of TR045. ETA to have Fire Resistance values for up to 120 mins as per EOTA TR 020 and FM Approval (use in Pipe Hangers). Anchor shall be fixed at right embedment depth as per embedment mark and activated using Hilti AT Tool Module to ensure adequate torque as per manufacture's torque tolerance published in ETA and same shall be documented and submitted to Project Manager at the time of inspection. Design of Anchor should be done as per ETAG 001 Annex C and TR045 using PROFIS Software as per actual load data and site conditions as provided by structural consultant and the report to be submitted to the project manager and design engineer for approval. Scanning before drilling to be done with Hilti PS Scanning tool to avoid rebar hits. stud anchor HST3 SS M24x200 30	Bd.C.2 Page No. 275	Number	3326	13

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
3136	Rebar	53.36	BDC 2	Suppling, Drilling/Cleaning hole and fixing HILTI make heavy duty ETA Approved HAS- U Chemical Anchor of appropriate size and fixing plates subsequently. Anchor comprises of HVU-2 flexible foil capsule that contains styrene free Urethane Methacrylate resin, hardener, quartz, sand/corundum and HAS-U threaded rod of minimum 5.8 steel grade, galvanized to minimum 5 microns. Anchor should be approved for cracked concrete, seismic & diamond drill holes. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 “guidelines for anchorage of chemical anchors for use in concrete” for approval. Application at site should be done as per manufacturer guidelines. Any report submittal with Installation pictures should be done using CFS-DM Software, which shall be charged extra. Anchor HVU2+ HAS U M10X90-21	Bd.C.2 Page No. 275	Number	390	8
2137	Rebar	53.37	BDC 2	Suppling, Drilling/Cleaning hole and fixing HILTI make heavy duty ETA Approved HAS- U Chemical Anchor of appropriate size and fixing plates subsequently. Anchor comprises of HVU-2 flexible foil capsule that contains styrene free Urethane Methacrylate resin, hardener, quartz, sand/corundum and HAS-U threaded rod of minimum 5.8 steel grade, galvanized to minimum 5 microns. Anchor should be approved for cracked concrete, seismic & diamond drill holes. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 “guidelines for anchorage of chemical anchors for use in concrete” for approval. Application at site should be done as per manufacturer guidelines. Any report submittal with Installation pictures should be done using CFS-DM Software, which shall be charged extra. AnchorHVU2+ HAS U M12x110-90	Bd.C.2 Page No. 275	Number	584	8
2138	Rebar	53.38	BDC 2	Suppling, Drilling/Cleaning hole and fixing HILTI make heavy duty ETA Approved HAS- U Chemical Anchor of appropriate size and fixing plates subsequently. Anchor comprises of HVU-2 flexible foil capsule that contains styrene free Urethane Methacrylate resin, hardener, quartz, sand/corundum and HAS-U threaded rod of minimum 5.8 steel grade, galvanized to minimum 5 microns. Anchor should be approved for cracked concrete, seismic & diamond drill holes. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 “guidelines for anchorage of chemical anchors for use in concrete” for approval. Application at site should be done as per manufacturer guidelines. Any report submittal with Installation pictures should be done using CFS-DM Software, which shall be charged extra. Anchor HVU2+ HAS U M16x125	Bd.C.2 Page No. 275	Number	926	9

Sr. Number	Chapter	SSR Item Number	Reference Number	Description of the item	Additional Specification	Unit	Proposed Completed Rate for 2020-21 excluding GST In Rs.	Proposed Labour Rate for 2020-21 excluding GST
2139	Rebar	53.39	BDC 2	Suppling, Drilling/Cleaning hole and fixing HILTI make heavy duty ETA Approved HAS- U Chemical Anchor of appropriate size and fixing plates subsequently. Anchor comprises of HVU-2 flexible foil capsule that contains styrene free Urethane Methacrylate resin, hardener, quartz, sand/corundum and HAS-U threaded rod of minimum 5.8 steel grade, galvanized to minimum 5 microns. Anchor should be approved for cracked concrete, seismic & diamond drill holes. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 “guidelines for anchorage of chemical anchors for use in concrete” for approval. Application at site should be done as per manufacturer guidelines. Any report submittal with Installation pictures should be done using CFS-DM Software, which shall be charged extra. Anchor HVU2+ HAS U M20x170	Bd.C.2 Page No. 275	Number	1561	11
2140	Rebar	53.40	BDC 2	Suppling, Drilling/Cleaning hole and fixing HILTI make heavy duty ETA Approved HAS- U Chemical Anchor of appropriate size and fixing plates subsequently. Anchor comprises of HVU-2 flexible foil capsule that contains styrene free Urethane Methacrylate resin, hardener, quartz, sand/corundum and HAS-U threaded rod of minimum 5.8 steel grade, galvanized to minimum 5 microns. Anchor should be approved for cracked concrete, seismic & diamond drill holes. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 “guidelines for anchorage of chemical anchors for use in concrete” for approval. Application at site should be done as per manufacturer guidelines. Any report submittal with Installation pictures should be done using CFS-DM Software, which shall be charged extra. Anchor HVU2+ HAS U M24x300	Bd.C.2 Page No. 275	Number	2132	14
2141	Rebar	53.41	BDC 2	Suppling, Drilling/Cleaning hole and fixing HILTI make heavy duty ETA Approved HAS- U Chemical Anchor of appropriate size and fixing plates subsequently. Anchor comprises of HVU-2 flexible foil capsule that contains styrene free Urethane Methacrylate resin, hardener, quartz, sand/corundum and HAS-U threaded rod of minimum 5.8 steel grade, galvanized to minimum 5 microns. Anchor should be approved for cracked concrete, seismic & diamond drill holes. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 “guidelines for anchorage of chemical anchors for use in concrete” for approval. Application at site should be done as per manufacturer guidelines. Any report submittal with Installation pictures should be done using CFS-DM Software, which shall be charged extra. Anchor HVU2+ HAS U M30 x 270	Bd.C.2 Page No. 275	Number	6300	19

MATERIAL RATES FOR SSR For Year 2020-2021

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
Building (Bd-A : Excavation)			
1	Blasting Powder	Kg.	75.00
2	Detonator	No.	19.00
3	Fuse	No.	180.00
4	Nipple For Fastening Detenator	No.	45.00
5	Noble Dynamite	Kg.	113.00
6	Red Tape Safety Fuse	R.Mt.	12.00
7	Blasting Fuse (Fuse wire)	No.	17.00
Building (Bd-C : Structural Steel Work)			
1	M.S.screws etc. 35mm dia. and 75mm long (100nos.)	Per Box	128
2	Nut Bolts 16mm dia./Nails all size	Kg.	90
3	Nut Bolts washers 12mm dia. 45mm long	No.	16
4	Nut Bolts washers 12mm dia. 75mm long	No.	21
5	M.S. Locking Arrangement for gate	No.	788
Building (Bd-F : Reinforcement Cement concrete)			
1	Binding Wire	Kg.	85
2	Centering Oil	Ltr.	18
3	Plastic Cover Block	No.	3
4	R.C.C.Jali 50mm thick	Sq.Mt.	529
5	Plastizer (Rheobuild) 825 RMt.	Ltr.	159
6	Concrete Spacer Block 15 mm	No.	3
7	Concrete Spacer Block 20 mm	No.	3
8	Concrete Spacer Block 25 mm	No.	3
9	Concrete Spacer Block 30 / 40 mm	No.	5
10	Anticorrrisive Primer Coat	Ltr.	161
11	Swaling Coat	Ltr.	140
12	PVC Coated GI Wire	L/M	203
13	Repairs to cut ends and damages with special liquid epoxy	L/M	113
14	Epoxy paint	Ltr	380
15	R.C.C.Jali 80mm thick	Sq.Mt.	760
Building (Bd-G : Brick Work)			
1	1st Class Bricks (Red)	No.	6.00
2	AAC Block 600x200x100 mm	No.	52.00
3	Jointing Mortar	Kg	20.00
4	Fly ash Bricks	No.	6.00
Building (Bd-H : Stone Masonry)			
1	Corner stone 38*20*30cm	No.	87
2	Khandakies	No.	76
3	Pin Header (Standard Size)	No.	57
Building (Bd-I : Cement Concrete Stone Masonry)			
1	Hollow Blocks C.C.0.2*0.2*0.4M	No.	40
2	Hollow Blocks C.C.0.1*0.2*0.4M	No.	35
3	Hollow Block C C 0.30 x 0.20 x 0.15	No.	42
4	Siporex Block 75x240x650 mm	No.	76
5	GBP Build Fast plus	Kg.	33
6	Siporex Block 100x240x650 mm	No.	81
7	Siporex Block 200x240x650 mm	No.	168

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
Building (Bd-J : Water Proofing)			
1	Bitumen (Compound)	Kg.	62
2	Brick bats	Cu.Mt.	750
3	Water proof compound I.S	Kg.	138
4	Tar Felt B.H.I.S.I.3mm thick	Sq.Mt.	90
5	Acrylic Polymer Modified waterproofing Powder	Kg.	164
6	Acrylic Polymer Modified Liquid	Ltr.	225
7	Fibre Glass Mesh	Sq.Mt.	71
8	Bitumen 85/25 Grade	Kg.	61
9	Bitumen 85/25 Grade Cold Primer	Kg.	46
10	Grit (Add Below 5.6)	Cmt	752
11	Bitumen Felt	Sqm	87
Building (Bd-K : Expansion Joint)			
1	Polydee-TP40 Primer	Kg.	525
2	Polydee-TP40 Primer	Kg.	525
3	Polydee-LM	Kg.	533
4	Polydee-LM 150mm width	Kg.	595
5	Bituflex Cloesdcell foam 30x30 mm	R.Mt.	65
6	AG 10 Granules	Kg.	23
7	Polydee-MC	Kg.	852
8	Polydee-41 sealant and polyseal	Kg.	815
9	Polydee-11	Kg.	1273
10	Bitumen Pad 25mm thick 1.20 x 1.20 Mtr	Smt.	950
Building (Bd-L : Plastering and Pointing)			
1	Neeru / Sanala	Kg.	6.00
2	White Putty (Cement)	Kg.	28
3	Texture Material	bags	1350
Building (Bd-M : Paving,Flooring and Dado)			
1	Rough Shahabad 25 to 30mm thick	Sq.Mt.	225
2	Rough Shahabad 40 to 45 mm thick	Sq.Mt.	270
3	Polished Shahabad 25 to 30mm thick	Sq.Mt.	264
4	Rough Shahabad 50 to 60mm thick	Sq.Mt.	311
5	Polished Shahabad 40 to 50mm thick For step	Sq.Mt.	428
6	Polished Shahabad Machine cut 25mm thick	Sq.Mt.	300
7	Polished Shahabad for step 25mm thick	Sq.Mt.	308
8	Tandoor Polished 25mm thick (Machine cut)	Sq.Mt.	366
9	Tandoor Polished 25mm thick (Hand Cut)	Sq.Mt.	315
10	Tandoor Polished for steps 25mm thick	Sq.Mt.	386
11	Black Kadappa (one side polish) (Machine cut) 25 mm thick	Sq.Mt.	425
12	Black Kadappa (one side polish) (Machine cut) 35mm thick	Sq.Mt.	491
13	Both Sides Polished Kadappa stone 25mm thick	Sq.Mt.	531
14	Kota stone (Machine cut) upto 25-30mm thick one side	Sq.Mt.	531
15	Kota stone (Hand cut) upto 25-30mm thick one side polished	Sq.Mt.	494
16	Kota stone for step polished) upto 25mm thick (1.2*0.3M)	Sq.Mt.	544
17	Ceramic tiles 30*30cm	Sq.Mt.	466
18	Ceramic Antiskid Flooring Tiles 30 x 30 cm	Sq.Mt.	463
19	Ceramic Tiles for dado 30 cm x 30 cm	Sq.Mt.	468
20	Ceramic Tiles for dado 30 x 45 cm	Sq.Mt.	489
21	Heavy duty interlocking concrete block 60mm thick gray 300 kg/sq.cm.	Sq.Mt.	505

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
22	Heavy duty interlocking concrete block 60mm thick coloured 300kg/sq.cm	Sq.Mt.	547
23	Heavy duty interlocking concrete block 80mm thick gray 300kg/sq.cm	Sq.Mt.	655
24	Heavy duty interlocking concrete block 80mm thick coloured 300kg/sq.cm	Sq.Mt.	753
25	Heavy duty interlocking concrete block 80mm thick rubber mould glossy 400kg/sq.cm	Sq.Mt.	908
26	Heavy duty interlocking concrete block 40mm thick colour 200 kg/sq.cm	Sq.Mt.	510
27	Telephone Black Granite	Sq.Mt.	2518
28	Green marble	Sq.Mt.	1243
29	Vitrified tiles Glossy Size 590 to 605 mm* 590 to 605 mm*8 to 10mm	Sq.Mt.	573
30	Vitrified matt finish - size 590 to 605 mm* 590 to 605 mm*8 to 10mm	Sq.Mt.	906
31	Vitrified rustic matt stone finish size 590 to 605mm *590 to 605mm*8 to 10mm	Sq.Mt.	960
32	Vertified stone effect finish size 590 to 605mm* 590 to 605mm * 8 to 10mm	Sq.Mt.	990
33	Calcet Powder	Kg.	53
34	Black Oxide powder	Kg.	123
35	Fevi Matt Chemical 10 Kg Bag	bags	693
36	Marble chips	Kg.	49
37	Heavy duty interlocking concrete block 60mm thick rubber mould glossy 400kg/sq.cm	Sq.Mt.	594
38	Tremix Treatment 100 mm thick	Sq.Mt.	75
39	Marble mosaic chequered tiles (gray)	Sq.Mt.	271
40	Colour cement	Kg.	16
41	Heavy Duty Designer come. tile for flooring	Sq.Mt.	865
42	Heavy Duty Designer come. tile for Steps	Sq.Mt.	955
43	PVC flooring	Sq.Mt.	346
44	Ceramic Tiles for dado 30 x 60 cm	Sq.Mt.	582
45	Marble (other than white makrana)	Sq.Mt.	1332
46	Kota stone (Hand cut) upto 45-55mm thick one side polished	Sq.Mt.	601
47	Vitrified matt finish - size 895 to 900 mm* 895 to 900 mm*10 to 12 mm	Sq.Mt.	1100
Building (Bd-N : Wood finish)			
1	Bees wax	Kg.	155.00
2	Coal Tar	Kg.	70.00
3	Common Spirit	Ltr.	88.00
4	French Polish	Ltr.	193.00
5	Varnish	Ltr.	183.00
6	Malemaine Polish	Ltr.	360.00
7	C.C.T.W. Ballies 125 mm Diameter	R.Mt.	172.00
Building (Bd-O : Oil Painting)			
1	Oil enamel paint/flat/glossy paint(ready mix) (with I.S.I. Mark)	Ltr.	285
2	Synthetic paint (ready mix)	Ltr.	263
3	Catonic emulsion paint	Kg.	335
4	White oil paint 100ml pack tin	No.	41
5	Red Oxide paint	Ltr.	171
6	Cement paint	Kg.	64
7	Steel Primer	Ltr.	177

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
8	Primer for plaster surface	Ltr.	199
9	Putty	Kg.	29
10	Boiled linseed oil	Ltr.	80
11	Linseed oil double boiled	Ltr.	123
12	Terpentine	Ltr.	98
13	Wood Primer	Ltr.	138
14	Brush for lettring	No.	43
15	Brush for road marking 5cm	No.	99
16	Brush for marking road 8cm	No.	191
17	Brush for road marking 10cm	No.	227
18	Lustre paint	Ltr.	227
19	Textured Synthetic paint	Ltr.	238
20	White lead paint	Kg.	302
21	Wall care putty	Kg.	52
22	Aluminium Paint	Lit.	301
23	Plastic emulsion paint	Ltr.	313.00
24	Acrylic Emulsion Paint	Ltr.	218.00
25	Exterior Primer	Ltr.	134.00
26	Weather shield paint	Ltr.	315.00
Building (Bd-P : Colour,white washing,distemping)			
1	Neel	Kg.	132.00
2	Oil bound distemper	Kg.	111.00
3	Red powder / Geru	Kg.	21.00
4	Saras	Kg.	67.00
5	Scrapping sand paper size (30 * 20cm)	No.	12.00
6	Dry distemper	Kg.	98.00
7	Chunam / White lime Powder	Kg.	17.00
8	paint Luster Paint	Ltr.	225.00
9	Roller Brush	No.	273.00
10	Royale Luxury Emulsion Paint	Ltr.	426.00
Building (Bd-Q : Wood work)			
	Country Teak Wood	Cu.Mt.	102750
1	Ghana teak wood	Cu.Mt.	85600
2	Teak Wood planks above 2.5 m length	Cu.Mt.	92000
3	Teak wood bidding 1/2" * 1/2"	Rmt	21
4	T.W.Balli 100 mm dia	Rmt	185
5	Jungle wood (non teak) normal	Cu.Mt.	37750
6	Bamboo 25mm dia.(4.5 to 6m)	No.	23
7	Bamboo 50mm dia.	No.	26
8	Bamboo Matting 1.2*1.8m	Sq.Mt.	59
9	Ply wood 12mm thick	Sq.Mt.	451
10	Ply wood 6mm thick	Sq.Mt.	340
11	Mica laminate as per ISI 0.1 mm thick	Sq.Mt	832
12	Face Veneel board 4 mm thick	Sq.Mt	478
13	Particle board B.W.P.Phinol bond 12mm thick	Sq.Mt.	372
14	Particle board B.W.P.Phinol bond 19 mm thick	Sq.Mt.	642
15	Formica 1.5 mm thick	Sq.Mt	985
16	Tower bolt brass oxidised 10 mm dia length 150 mm	No	211
17	Ferical	Kg	213
18	Ply wood 18mm thick Commercial	Sq.Mt.	875
19	Teak wood battens 50 * 25mm	Cu.Mt.	60750
20	Teak wood batten 25 mm * 12 mm	Cu.Mt.	61400
21	Veneer 3.5 to 4 mm thick	Sq.mt.	490
22	Alluminium rod 25mm dia	Rmt.	64

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
Building (Bd-R : Roofing and ceiling)			
1	A.C.Corrugated sheet 6mm thick	Sq.Mt.	127
2	A.C.Sheet ridge	Pair	293
3	A.C.Sheet plain 4mm thick	Sq.Mt.	210
4	G.C.I. Sheet (Corrugated) 22 BWG	M.T.	65800
5	G.C.I. Sheet (Corrugated) 24 BWG	M.T.	65800
6	G.I. Sheet (plain) 22 BWG	Sq.Mt.	419
7	G.I. Sheet (plain) 24 BWG	Sq.Mt.	332
8	G.I.Washers	Kg.	107
9	G.I. J or L hooks 6 mm dia.	No.	7
10	Nails iron all size	Kg.	85
11	Mangalore tiles class AA	No.	20
12	Mangalore Ridge / Hip tiles	No.	34
13	Mangalore Glass tiles	No.	383
14	Mangalore Pattern cowl Ventilator	No.	245
15	G.I. Pre coated trapezoidal 0.50 mm thick roof Metalic Coloured Sheet	Sq.Mt.	735
16	G.I. Pre coated Ridge Sheet	R.Mt.	529
17	Gypsum powder	Kg.	20.00
18	Aluminium Alloy plate 2mm thick	Sq.Mt.	1385
19	Aluminium sheeting fixed with encapsuled lens type reflective sheeting including 2% towards lettering , cost of angle iron, cost of drilling holes , nuts, bolts etc. and signs as applicable.	Kg.	164
20	Plaster Of Paris	bags	235
21	Decorative Board of Fibrous Plaster of Paris 12 to 15 mm	Sq.Mt.	383
22	Acoustic Board 12 mm thick	Sq.Mt.	271
23	Gypsum Board 12.5 mm thick	Sq.Mt.	207
24	UPVC 3 layer trapezoidal 2.00 mm sheet	Sq.Mt.	835
25	Light weight calcium silicate tile of size 595 x 595 mm of texture spin stone / cosmos / plain / Glode fine fissured.	Sq.Mt.	988
26	Bioguard Board 16 mm	Sq.Mt.	1013
27	Ultima tile	Sq.Mt.	1269
28	Optra tile	Sq.Mt.	1630
29	Proflex Sheet 1 mm	Kg.	85
30	Sky light 2 mm thick	Kg.	1298
31	Hanger rod 4mm thick	No.	10
32	level Adjustment clip size 85x30x0.8mm	No.	10
33	Dash fastener 12.5mm dia 50mm long	No.	52
34	Soffit cleat 25mmx35mmx1.60mm	No.	6
35	Wooden Screws with plastic rawl plugs 35mmx8mm	No.	1.00
36	Light weight calcium silicate tiles of size 595x595mm of texture Spintone for Tegular edge ceiling	No.	1168
37	Plain Zinc Sheet	Sq.Mt.	240
38	UPVC ridge/hip tiles	No.	355
39	Hanger wire (2.68 mm dia), 1.82 m long	No.	22
40	Dune edge tiles	Sq.Mt.	863
41	Fine fissured edge tiles	Sq.Mt.	713
42	Turbo ventilator 24"	No.	8095
43	Tarat 36" width (Gunny Cloth)	R.Mt.	66
44	Wire glass	Sq.Mt.	625
45	Fire wood	Quintal	355
46	Precoated Galvanised Steel Plain Sheet	Smt	919

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
47	Connecting clip for supports	No.	7
48	Dry wall screws 25 mm	No.	4
49	Jointing Compound	Kg.	47
50	Jointing Tape	Rmt.	6.0
51	Minaral Fibre board 600 x 600 mm	Sq.Mt.	925.0
52	Perimeter Channel 80 x 8 mm	Kg.	186.0
53	Screws 1 1/2"	No.	1.0
54	Screws 1/2"	No.	1.0
55	Rawal Plug	No.	1.0
55	Plain Zinc Sheet 0.50 mm thick	Sq.mt.	590.0
Building (Bd-T : Doors and windows)			
1	Aldrop 300*16mm Chromium Plated	No.	183
2	Aldrop Iron Oxidise 300*16mm	No.	143
3	Aldrop Stainless steel 300*16mm	No.	380
4	Handle 125mm M.S. Chromium Plated	No.	73
5	Handle 150mm Brass Chromium plated (Rounded Shape)	No.	270
6	Handle Alluminium 125 mm	No.	67
7	Iron hinges chromium plated 125mm	No.	73
8	But Hinges Alluminium 125mm	No.	80
9	G.I.Screw 50mm	Doz.	29
10	G.I.Screw 25mm	Doz.	16
11	Stainless Steel Hinges - 125mm 14 gauge (Heavy Duty)	No.	76
12	Tower bolt Aluminium 10mm dia.length 250mm	No.	85
13	Tower bolt Aluminium 10mm dia.length 200mm	No.	73
14	Tower bolt M.S. Chromium plated 10mm dia,length 300mm	No.	81
15	Tower bolt M.S. Chromium plated 10mm dia,length 200mm	No.	75
16	Cold Rolled Steel Hollow Section Door frame 1829*610mm	No.	1850
18	Aluminium stay 25cm	No.	70
19	Aluminium stay 30cm	No.	80
20	Jali fly proof	Sq.Mt.	245
21	Jali chicken mesh	Sq.Mt.	65
22	Jali welded mesh 25*25* 13 Guage	Sq.Mt.	173
23	Jali welded mesh 25*25* 11 Guage	Sq.Mt.	268
24	Jali welded mesh 50*25 13 Guage	Sq.Mt.	193
25	Jali welded mesh 50*25 11 Guage	Sq.Mt.	330
26	Hold fast Iron 300*40*5mm	No.	70
27	Sliding Door Bolt Stainless Steel 12mm dia. 250mm length	No.	110
28	Glass plain 3mm	Sq.Mt.	325
29	Glass plain 5mm	Sq.Mt.	461
30	Glass obscured (bajara) 5mm	Sq.Mt.	485
31	G.I. Nut Bolt	Kg.	105
32	Housing box to rolling shutter	Sq.Mt.	1312
33	Mechanical Gear For Rolling Shutter	No.	2106
34	Mortice lock superior	No.	831
35	Solid Core commercial shutter 30mm thick phenol bonded with face veneer 3 mm thick both side	Sq.Mt.	867
36	Iron washer 12mm to 16mm	No.	1
37	Aluminium Section	Kg.	189
38	Nylon / PVC Gasket	R.Mt.	29
39	Alluminium Screw 32 x 6 mm, 25 x 6 mm	Doz.	25

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
40	Concealed locking arrangement of 100 mm length for sliding window	No.	125
41	Alluminium Grill 7.50 mm thick	Sq.Mt.	1160
42	Hydraulic floor spring heavy duty (150 Kg capacity) ISI mark	No.	1118
43	Iron Oxidized sliding door bolt 200 mm length, 12 mm dia	No.	87
44	Powder and Chemicals for colour anodizing process of alluminium sections	Kg.	45
45	Lock for Sliding Shutter	No.	134
46	All Bearing Roller	No.	99
47	All Frame Rail Angle	Kg.	219
48	Welding Electrodes	No.	5
49	C.R.C. Sheet	Sq.Mt.	563
50	Abstrone Butadyne Styrene (ABS) Door Shutter including Transportation	No.	648
51	Puff Insulation 35-40 Kg/Cumt. Density	Kg.	281
52	PVC Door Shutter 34 mm thick Factory Made Shutter	Sq.Mt.	3919
53	FRP Door Shutter 30 mm thick Factory Made Shutter	Sq.Mt.	1258
54	FRP Door Shutter 35 mm thick Factory Made Shutter	Sq.Mt.	1377
55	Bison Pannel	Sq.Mt.	478
56	PVC factory made solid panel door shutter with stainless steel fixutres & fastening	Sq.Mt.	3813
57	PVC factory made flush door 30 mm with stainless steel fixutres & fastening	Sq.Mt.	3758
58	Sliding door bolt Chromium plated 250mm	No.	83
59	Acrylic Plain Sheet 3 mm	Sq.Mt.	853
60	Aldrop Stainless steel 300*16mm	No	358
61	Aldrop Stainless steel 250*16 mm	No	308
62	Handle 150mm Stainless Steel (Rounded Shape)	No	31
63	Handle 200mm Stainless Steel (Rounded Shape)	No	71
64	Stainless Steel Hinges - 100mm 14 gauge (Heavy Duty)	No	42
65	Stainless Steel Hinges - 125mm 14 gauge (Heavy Duty)	No	70
66	Housing box to rolling shutter	Smt	1465
67	Mechanical Gear For Rolling Shutter	No	2168
68	Door Stopper Stainless Steel	No	143
69	Tower Bolt Stainless Steel 200 mm	No.	85
70	Tower Bolt Stainless Steel 250 mm	No.	142
71	Sliding Door Bolt Stainless Steel 250 mm	No.	100
72	Handle Stainless Steel 100 mm	No.	42
73	Eye Hole Lens	No.	215
74	Rolling Shutter	Smt.	1950
75	Ply Wood	Smt.	414
76	Stainless steel hooks and eyes 200 mm	No.	73
77	Steel Window	Kg.	52
78	Powder Coating	Sq.Mt.	469
79	Rubber Lining	R.Mt.	26
80	Ply wood 9 mm thick	Sq.Mt.	426
81	Laminated board double 12mm thick	Sq.Mt.	828
82	Alluminium Section anodized	Kg.	232
83	Handle iron oxidised 150 mm	No.	59
84	Hinges iron oxidised 100 mm	No.	43
85	T. W. Particle board, both face laminated 12 mm	Smt.	416
86	Battens T.W. 70 x 45 mm	Cmt.	83500

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
87	Nuts and Bolts	Nos.	110
88	Plain FRP Sheet 22 B.W.G.	Smt.	2405
89	TW Runner (6" x 3")	Cmt.	84250
90	Alluminium Screw	Doz.	8
91	F Patti	Kg.	193
92	Teak wood planks above 2.5m length	Cu.Mt.	94500
93	Vision Panel	No.	224
94	Solid core shutter 35 mm thick with commercial veneer facing and phenol bonded	Sq.mt.	1237
95	Oil Paint	Ltr.	281
96	Acrylic Plain Sheet 2 mm thick	Sq.Mt.	733
97	Aluminium Sheet 24 B.W.G	Sq.mt.	393
98	Alluminium Section with Powder Coating	Kg.	215
99	Concealed lock	No.	138
100	Mosquito proof Nylone net	Sq.Mt.	224
101	Solid Core commercial shutter 30mm thick phenol bonded with face veneer 3 mm thick both side with bidding patty	Sq.Mt.	945
Building (Bd-V : Water supply and sanitary fittings)			
1	G.I. Pipe 100mm dia. Medium type	R.Mt.	823
2	G.I. Pipe 100mm dia. Heavy type	R.Mt.	1090
3	G.I. Pipe 15mm dia. Medium type	R.Mt.	145
4	G.I. Pipe 15mm dia. Heavy type	R.Mt.	178
5	G.I. Pipe 20mm dia. Medium type	R.Mt.	170
6	G.I. Pipe 20mm dia. Heavy type	R.Mt.	200
7	G.I. Pipe 25mm dia. Medium type	R.Mt.	208
8	G.I. Pipe 25mm dia. Heavy type	R.Mt.	277
9	G.I. Pipe 32mm dia. Medium type	R.Mt.	255
10	G.I. Pipe 32mm dia. Heavy type	R.Mt.	298
11	G.I. Pipe 40mm dia. Medium type	R.Mt.	305
12	G.I. Pipe 40mm dia. Heavy type	R.Mt.	347
13	G.I. Pipe 50mm dia. Medium type	R.Mt.	401
14	G.I. Pipe 50mm dia. Heavy type	R.Mt.	475
15	G.I. Pipe 65mm dia. Medium type	R.Mt.	507
16	G.I. Pipe 65mm dia. Heavy type	R.Mt.	593
17	G.I. Pipe 80mm dia. Medium type	R.Mt.	629
18	G.I. Pipe 80mm dia. Heavy type	R.Mt.	800
19	PVC Nahani Trap 75 mm	No.	115
20	G.I.Clamps 100mm to 150mm	No.	22
21	PVC Nahani Trap 150 mm	No.	145
22	G.I.Clamps 12mm to 32mm	No.	25
23	G.I.Clamps 40mm to 80mm	No.	17
24	Anglo Indian W.C. Pan Colour	No.	1115
25	G.I.Fixtures	Kg.	90
26	P.V.C. Cowl 100 mm	No.	65
27	G.I.Screws 30mm	No.	5
28	G.I.Screws 40mm	No.	6
29	G.I.Union 25mm dia.	No.	94
30	Gully trap cover with frame	No.	563
31	Gun Metal stop tap with crutch wheel 20mm	No.	473
32	Gun metal stop tap with crutch wheel 25mm	No.	755
33	Gun metal stop tap with crutch wheel 15mm	No.	344
34	Gun metal stop tap with crutch wheel 20mm	No.	613
35	C.I.Bend 75mm dia.	No.	270
36	C.I.Bend 100mm dia.	No.	317
37	C.I.Bip tap 12mm	No.	98

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
38	C.I.Grating 150mm dia.	No.	118
39	C.I.Grating 100mm dia.	No.	69
40	C.I.Grating 75mm dia.	No.	42
41	C.I.Brackets	Pair	120
42	C.I.Collers 100mm dia.	No.	318
43	C.I.Copllers 75mm dia.	No.	232
44	C.I.Cover 45*30 cm with frame	No.	567
45	C.I.Cowl / Vent 100mm dia.	No.	322
46	C.I.Cowl / Vent 150mm dia.	No.	650
47	C.I.Cowl / Vent 75mm dia.	No.	258
48	C.I.Hinged Cover with frame	No.	585
49	C.I.Man hole cover 50 kg.	No.	3663
50	C.I.Man hole cover 75 kg.	No.	5368
51	C.I.Man hole cover 100 kg.	No.	6883
52	C.I.Man hole cover 175 kg.Heavy (0.9*0.45m)	No.	12500
53	C.I.Nahani trap 100mm dia.(375mm long)	No.	453
54	C.I.Nahani trap 75 to 80mm dia.(375mm long)	No.	340
55	C.I.100*75*300 long arm (wt. 6kg)nahani trap	No.	993
56	C.I.Soil pipe 100mm dia.	R.Mt.	875
57	C.I.Soil pipe 150mm dia.	R.Mt.	1630
58	C.I,Soil pipe 75 to 80mm dia.	R.Mt.	710
59	C.I.Shoe 75 mm dia.	No.	265
60	C.I. Shoe 100 mm dia.	No.	375
61	C.I.Shoe 150mm	No.	520
62	Ball cock 15mm dia.P.V.C.FLOAT	No.	293
63	Ball cock 25mm dia.P.V.C.FLOAT	No.	575
64	Ball cock 40mm dia.P.V.C.FLOAT	No.	718
65	Ball cock 50mm dia.P.V.C.FLOAT	No.	1913
66	Bib cock stop tap brass heavy 15mm	No.	395
67	Bib cock stop tap brass heavy 20mm	No.	605
68	Bib cock stop tap brass heavy 25mm	No.	863
69	Bib tap 12mm brass medium	No.	250
70	Colour wash hand basin 55*40cm	No.	1293
71	Colour wash hand basin 63*45cm	No.	1365
72	White glazed wash basin 45*30cm	No.	1128
73	White glazed wash hand basin 55*50cm	No.	1563
74	P.V.C. flexible Waste Pipe 32 mm dia	No.	50
75	White Glazed Wash Hand Basin 63 x 45 cm	No.	2013
76	Sink white glazed 45*20*30cm	No.	848
77	Pedestal for wash basin (standard size)	No.	1960
78	C.C.Septic tank 0.9m dia.(2.5m long)	No.	7788
79	C.C.Septic tank 1.20m dia.(2.5m long)	No.	10185
80	C.I.Steps for manhole	No.	515
81	C.I.Cover with frame (Gully trap)	No.	208
82	C.I.Plug Bend 150MM dia.	No.	1093
83	Clamp for G.I.pipe 25mm	No.	15
84	Colour European type W.C.Pan	No.	4315
85	European type glazed W.C.pan	No.	4315
86	W.C.PAN Coloured glazed 64CM.(Orissa)	No.	2315
87	W.C.PAN White glazed 58 CM.Indian	No.	2258
88	W.C.PAN White glazed 57.50 CM (Orissa)	No.	913
89	Fibre flushing tank for W.C.	No.	685
90	Flushing tank automatic Urinal 10ltr. C.I.	No.	890
91	Flushing tank automatic Urinal 5ltr. (P.V.C.)	No.	667
92	Low level flush pr. St. 10ltr.	No.	1188
93	Flat back Urinal	No.	1378
94	Stall Type Urinal	No.	4018

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
95	Lipped type Urinal	No.	580
96	Coloured glazed full stall Urinal	No.	4045
97	Bleaching Powder	Kg.	75
98	Potassium Permanganate	Kg.	370
99	Nylon Brush	No.	65
100	Duster	No.	55
101	Plastic Bucket	No.	120
102	Coir	Kg.	66
103	Gunny Cloth	R.Mt.	40
104	Kharata	No.	40
105	Wheel stop tap brass 15mm	No.	261
106	Wheel stop tap brass 20mm	No.	369
107	Wheel stop tap brass 25mm	No.	490
108	Socket brass for 32mm tap	No.	57
109	Socket brass for 40mm tap	No.	72
110	Socket brass for 50mm tap	No.	112
111	Socket brass for 65mm tap	No.	174
112	Socket for 100mm tap	No.	423
113	Socket for 15mm tap	No.	23
114	Socket for 20mm tap	No.	32
115	Socket for 25mm tap	No.	40
116	Socket for 32mm tap	No.	63
117	Socket for 40mm tap	No.	75
118	Socket for 50mm tap	No.	115
119	Socket for 65mm tap	No.	183
120	Socket for 80mm tap	No.	274
121	Span Yarn	No.	143
122	Strainer for 100mm	No.	2565
123	Strainer for 40mm	No.	487
124	Strainer for 50mm	No.	735
125	Strainer for 80mm	No.	1630
126	Strainer for 15mm	No.	154
127	Strainer for 20mm	No.	154
128	Strainer for 25mm	No.	175
129	Stone ware pipe 100mm dia.	R.Mt.	105
130	Stone ware pipe 150mm dia.	R.Mt.	154
131	Stone ware pipe 225mm dia.	R.Mt.	199
132	Stone ware glazed pipe half round 100mm dia.	R.Mt.	141
133	Stop tap brass with crunch wheel 15mm dia.	No.	112
134	Towel rod with clamps 16mm dia.	No.	184
135	Mirror 40*50cm. With plastic frame	No.	290
136	Brass T Thimble Socket 32mm dia.	Pair	104
137	Brass wheel stop tap 32mm dia.	No.	541
138	Brass wheel stop tap 40mm dia.	No.	669
139	Brass wheel stop tap 50mm dia.	No.	1195
140	Brass wheel stop tap 65mm dia.	No.	1661
141	Brass wheel stop tap 80mm dia.	No.	2858
142	Half turn flush cock 25mm dia.	No.	580
143	12mm flexible inlet pipe connection	No.	275
144	Bell mouth cover 100mm dia.	No.	80
145	Box chamber with lock 0.6*0.45m	No.	583
146	Brass nozzle pillar tap 12mm	No.	250
147	Black bakelite seat to european closer	No.	367
148	Concussion push button type gun metal tap 15 to 25mm dia.	No.	170
149	Coupling cast Iron 100mm dia.	No.	368
150	Coupling cast Iron 80mm dia.	No.	350

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
151	Chromium plated 12mm dia.bib cock	No.	80
152	C.I.Trap grating 15*10 cm	No.	80
153	C.I.Y junction 100mm dia.	No.	828
154	C.I.Y junction 150mm dia.	No.	1820
155	C.I.Y junction 75mm dia.	No.	590
156	Enameled bend 40mm dia.	No.	195
157	Ferrul for C.I.pipr 100mm	No.	152
158	White glazed foot rest chequered 25*10 cm	Pair	152
159	Half round earthware pipe 100mm(60cm long)	No.	104
160	Half round earthware pipe 150mm(60cm long)	No.	313
161	Jute Rope	Kg.	91
162	Half round chaina ware pipe 100mm(60cm long)	No.	103
163	Lead pipe 32mm dia.	R.Mt.	320
164	Mohagani seat with lid	No.	293
165	Mosquito proof coupling	No.	45
166	Non-return valve 15mm for water meter	No.	191
167	Non-return valve 25mm for water meter	No.	340
168	Non-return valve 20mm for water meter	No.	239
169	Piller tap 12mm dia.chromium plated heavy	No.	504
170	P.Trap and lead pipe upto 40mm dia.	No.	295
171	Rubber gasket (25, 28 and 20 cm)	R.Mt.	160
172	Rubber Incertion	Kg.	290
173	Rubberised adhesive	Ltr.	315
174	Salt glazed stone ware gully trap (150*150mm)	No.	128
175	Self project tap brass chromium plated 15mm	No.	136
176	Sewer trap	No.	683
177	Shower rose chromium plated brass 10cm	No.	268
178	P.V.C. pipe 15mm dia.10kg/cm2 pressure(class IV)	R.Mt.	28
179	P.V.C. pipe 20mm dia.10kg/cm2 pressure(class IV)	R.Mt.	45
180	P.V.C. pipe 25mm dia.10kg/cm2 pressure(class IV)	R.Mt.	65
181	P.V.C. pipe 32mm dia.10kg/cm2 pressure(class IV)	R.Mt.	95
182	P.V.C. pipe 40mm dia.10kg/cm2 pressure(class IV)	R.Mt.	145
183	P.V.C. pipe 50mm dia.10kg/cm2 pressure(class IV)	R.Mt.	227
184	P.V.C. pipe 60mm dia.10kg/cm2 pressure(class IV)	R.Mt.	317
185	P.V.C. pipe 75mm dia.4 kg/cm2 pressure(class II)	R.Mt.	195
186	P.V.C. 75 mm Soil Pipe 6 Kg/cm2 Pressure	R.Mt.	220
187	P.V.C. pipe 90mm dia.4 kg/cm2 pressure(class II)	R.Mt.	195
188	P.V.C.pipe 110mm dia.4kg/cm2 pressure (class II)	R.Mt.	280
189	P.V.C. 110 mm Rain Water Pipe 6Kg/cm2 Pressure	R.Mt.	195
190	P.V.C. 110 mm Soil Pipe 6 Kg/cm2 Pressure	R.Mt.	327
191	P.V.C.pipe 140mm dia.4kg/cm2 pressure (class II)	R.Mt.	458
192	P.V.C.pipe 160mm dia.4kg/cm2 pressure (class II)	No.	610
193	P.V.C.pipe 160mm dia.Soil Pipe	R.Mt.	644
194	P.V.C.pipe 160mm dia. Rain Water Pipe	R.Mt.	644
195	P.V.C.Socket 15mm dia.	No.	7
196	P.V.C.Socket 20mm dia.	No.	9
197	P.V.C.Socket 25mm dia.	No.	13
198	P.V.C.Socket 32mm dia.	No.	15
199	P.V.C.Socket 40mm dia.	No.	19
200	P.V.C.Socket 50mm dia.	No.	34
201	P.V.C.Socket 60mm dia.	No.	49
202	P.V.C.Flushing tank (12 ltr. Capacity)	No.	888
203	Flush valve 32mm dia.	No.	1357
204	Ferocret tank	Ltr.	11
205	Stainless Steel sink of size 600*510*200mm of nirali or equivalent make	No.	6725
206	C.P.pillar cock	No.	615

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
207	C.P.pillar cock (ISI)	No.	615
208	C.P.pillar cock long neck with aerator	No.	818
209	C.P.Bib cock (ISI)	No.	577
210	C.P.Bib Cock long thread	No.	578
211	C.P.2-way bib cock	No.	825
212	C.P.bib cock with wall flange long thread	No.	593
213	C.P.Bib cock with nozzle	No.	628
214	C.P.Angular stop cock	No.	515
215	C.P.Angular stop cock long thread	No.	1813
216	C.P.angular stop cock with wall flange	No.	545
217	C.P.central hole basin mixer without popup waste system with 450mm long braided hoses	No.	1983
218	C.P.wall mixer with telephone shower arrangement only but without telphone shower crutch	No.	2398
219	C.p.wall mixer non-telephonic shower arrangement	No.	2033
220	C.P.wall mixer(wall mounted model) with telephone shower arrangement only and with telephone shower crutch	No.	2655
221	C.P.wall mixer with provision for overhead shower with 115mm long bend pipe and wall flange	No.	2718
222	C.P.sink mixer with swinging casted spout (wall mounted)	No.	2108
223	C.P.sink mixer swinging spout (table mounted model) 450mm long braided hoses	No.	3083
224	C.P.sink cock with swinging casted spout	No.	1055
225	C.P.sink cock with raised 'J' shaped swinging casted spout (table mounted)	No.	1055
226	C.p.shower arm 190mm long light body with wall flange	No.	570
227	C.P.Flush cock with wall flange 25mm with plain knob	No.	1413
228	C.P.Towel rail 24"	No.	798
229	C.P.Towel ring square jaquar make continental	No.	677
230	C.P.Soap dish hooker jaquar make continental	No.	626
231	C.P.soap dish (polyurethane)	No.	815
232	C.P.Toilet paper holder	No.	797
233	C.P.Toilet rack 24"with lower hanger	No.	1785
234	C.P.Handshower (health faucet) 1m.PVC tube with wall hook	No.	793
235	C.P.Pillar cock queen's collection (quarter turn fitting)	No.	1144
236	C.P.Bib cock with wall flange aqua make queen's collection (quarter turn fitting)	No.	1108
237	C.P.2-way bib cock with wall flange aqua make queen's collection (quarter turn fitting) (Cat. No. QQT 7041)	No.	1615
238	C.P.Angular stop cock with wall flange aqua make queen's collection (quarter turn fitting)	No.	1034
239	C.P.central hole basin mixer with regular spout without popup waste system with 450mm long braided hoses jaquar make queen's collection (quarter turn fitting)	No.	2035
240	C.P.central hole basin mixer with regular spout with popup waste system with 450mm long braided hoses jaquar make queen's collection (quarter turn fitting)	No.	2954

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
241	C.P.central hole basin mixer with small spout without popup waste system with 450mm long braided hoses jaquar make queen's collection (quarter turn fitting) (Cat. No. QQT 7171B)	No.	2809
242	C.P.wall mixer (wall mounted model) with telephonic shower arrangement only but without crutch jaquar make queen's collection (quarter turn filling)	No.	3074
243	C.P.wall mixer non-telephonic shower system jaquar make queen's collection (quarter turn filling)	No.	3083
244	C.P.wall mixer (wall mounted model) with telephonic shower arrangement only and with telephone shower crutch jaquar make queen's collection (quarter turn filling)	No.	3763
245	Hydraulic door closer	No.	1187
246	cPVC pipe 15mm dia.	R.Mt.	53
247	cPVC pipe 20mm dia.	R.Mt.	71
248	cPVC pipe 25mm dia.	R.Mt.	108
249	cPVC pipe 32mm dia.	R.Mt.	162
250	cPVC pipe 40mm dia.	R.Mt.	229
251	cPVC pipe 50mm dia.	R.Mt.	385
252	cPVC Coupling for 15mm dia.	No.	12
253	cPVC Coupling for 20mm dia.	No.	14
254	cPVC Coupling for 25mm dia.	No.	23
255	cPVC Coupling for 32mm dia.	No.	48
256	cPVC Coupling for 40mm dia.	No.	85
257	cPVC Coupling for 50mm dia.	No.	169
258	Elbow 90 Degree for 15mm dia.	No.	15
259	Elbow 90 Degree for 20mm dia.	No.	17
260	Elbow 90 Degree for 25mm dia.	No.	34
261	Elbow 90 Degree for 32mm dia.	No.	74
262	Elbow 90 Degree for 40mm dia.	No.	135
263	Elbow 90 Degree for 50mm dia.	No.	174
264	Tee for 15mm dia.	No.	19
265	Tee for 20mm dia.	No.	26
266	Tee for 25mm dia.	No.	42
267	Tee for 32mm dia.	No.	94
268	Tee for 40mm dia.	No.	163
269	Tee for 50mm dia.	No.	345
270	End cap for 15mm dia.	No.	9
271	End cap for 20mm dia.	No.	13
272	End cap for 25mm dia.	No.	18
273	End cap for 32mm dia.	No.	37
274	End cap for 40mm dia.	No.	54
275	End cap for 50mm dia.	No.	120
276	Ball cock for 15mm dia.	No.	95
277	Ball cock for 12mm dia.	No.	152
278	Ball cock for 25mm dia.	No.	277
279	Ball cock for 32mm dia.	No.	488
280	Ball cock for 40mm dia.	No.	764
281	Araldite adhesive	Kg	1190
282	Ball valves for 50mm dia.	No.	1305
283	Male adapter (Brass Threads) for 15mm dia.	No.	138
284	Male adapter (Brass Threads) for 20mm dia.	No.	176
285	Male adapter (Brass Threads) for 25mm dia.	No.	268
286	Male adapter (Brass Threads) for 32mm dia.	No.	545
287	Male adapter (Brass Threads) for 40mm dia.	No.	668

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
288	Male adapter (Brass Threads) for 50mm dia.	No.	1275
289	Male adapter (Plastic Threads) for 15mm dia.	No.	15
290	Male adapter (Plastic Threads) for 20mm dia.	No.	19
291	Male adapter (Plastic Threads) for 25mm dia.	No.	30
292	Male adapter (Plastic Threads) for 32mm dia.	No.	52
293	Male adapter (Plastic Threads) for 40mm dia.	No.	76
294	Male adapter (Plastic Threads) for 50mm dia.	No.	139
295	Female adapter (Brass Threads) for 15mm dia.	No.	130
296	Female adapter (Brass Threads) for 20mm dia.	No.	175
297	Female adapter (Brass Threads) for 25mm dia.	No.	265
298	Female adapter (Brass Threads) for 32mm dia.	No.	558
299	Female adapter (Brass Threads) for 40mm dia.	No.	616
300	Female adapter (Brass Threads) for 50mm dia.	No.	1193
301	Female adapter (Plastic Threads) for 15mm dia.	No.	18
302	Female adapter (Plastic Threads) for 20mm dia.	No.	27
303	Female adapter (Plastic Threads) for 25mm dia.	No.	40
304	Union for 15mm dia.	No.	79
305	Union for 20mm dia.	No.	94
306	Union for 25mm dia.	No.	106
307	Union for 32mm dia.	No.	151
308	Union for 40mm dia.	No.	244
309	Union for 50mm dia.	No.	428
310	Cross for 15mm dia.	No.	30
311	Cross for 20mm dia.	No.	59
312	Step over Bend 15mm dia.	No.	59
313	Step over Bend 20mm dia.	No.	94
314	Tee holder for 15mm dia.	No.	28
315	Tee holder for 32mm dia.	No.	85
316	End plug threaded for 15mm dia.	No.	13
317	R.C.C.Chamber cover with frame 90cm*45cm Heavy Duty 225kg	No.	3570
318	R.C.C.Chamber cover with frame 90cm*45cm Medium Duty 140kg	No.	2320
319	R.C.C.Chamber cover with frame 60cm*45cm Heavy Duty 160kg	No.	3145
320	R.C.C.Chamber cover with frame 60cm*45cm Medium Duty 100kg	No.	1915
321	I.S.I.Ferrul Connection 15mm dia.	No.	515
322	I.S.I.Ferrul Connection 20mm dia.	No.	831
323	I.S.I.Ferrul Connection 25mm dia.	No.	1425
324	I.S.I.Ferrul Connection 32mm dia.	No.	2338
325	I.S.I.Ferrul Connection 40mm dia.	No.	3363
326	I.S.I.Ferrul Connection 50mm dia.	No.	5675
327	Water meter 15 mm diameter	No.	1358
328	Water meter 20 mm diameter	No.	2228
329	Water meter 25 mm diameter	No.	3405
330	Water meter 40 mm diameter	No.	5813
331	Water meter 50 mm diameter	No.	7525
332	Water meter 80 mm diameter	No.	12786
333	Water meter 100 mm diameter	No.	17515
334	Non return Valve 40 mm diameter	No.	1579
335	Non return Valve 50 mm diameter	No.	2255
336	Non return Valve 80 mm diameter	No.	6133
337	Non return Valve 100 mm diameter	No.	11458
338	Colour Wash Hand Basin 0.45 x 0.30	No.	720
339	White Glaze Earth Sink 0.6 x 0.2 x 0.45	No.	1660
340	Clamp for G.I.pipe 200mm	No.	38

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
341	European type glazed W.C.pan 68cm	No.	2388
342	European white glazed earthen ware closet pan	No.	2388
343	P.V.C. Nahni Trap	R.Mt.	151
344	P.V.C. Connector. 15 mm dia	No.	63
345	Low level flushing cistern	No.	1025
346	Upvc sanitary pipes all 20 mm dia.	R.Mt.	90
347	Upvc sanitary pipes all 75 mm dia.	R.Mt.	211
348	Bib cock stop tap brass heavy 15mm	No.	796
349	Stainless Steel sink of size 610 x 460 x 200 mm of nirali or equivalent make	No.	9205
350	Upvc sanitary pipes all 63 mm dia.	R.Mt.	1385
351	W.C.PAN Colour glazed 57.50 CM (Orissa)	No.	1413
352	Pillar cock mixer & Angle cock	No.	763
353	Upvc sanitary pipes all 25 mm dia.	R.Mt.	370
354	Upvc sanitary pipes all 15 mm dia.	R.Mt.	180
355	Cement	bags	275
356	Upvc sanitary pipes all 40 mm dia.	R.Mt.	610
357	Upvc sanitary pipes all 50 mm dia.	R.Mt.	850
358	Stainless Steel sink of size 470 x 420 x 178 mm of nirali or	No.	4750
359	Bib cock Long Arm	No.	287
360	Bottletrap wash basin 32 mm Chromium Plated	No.	1355
361	Upvc sanitary pipes all 32 mm dia.	R.Mt.	495
362	Hamp rope	Kg.	94
363	Bib cock stop tap brass heavy 15 mm	No.	403
364	Colour wash hand basin 45*30cm	No.	718
365	Ultra 250 mm. dia. uPVC 90 degree junction chamber base with U trap	No.	938
366	Ultra 250 mm.dia. uPVC Cover & Frame	No.	415
367	uPVC Blanking Plug 110 mm	No.	209
368	uPVC 90 degree bend	No.	187
369	Ultra Shaft 250x470mm	No.	267
370	Water jet with accessories	No.	356
371	White glazed full stall urinal	No.	4222
372	Glass plain 6mm thick	Sq.Mt.	893
373	White Glazed Earthenware Squatting plate (Ladies Urinal)	No.	640
374	Autoclosing pillar cock of pressmatic tap	No.	1170
375	PVC Aqua kraft type super bib tap 15 mm	No.	202
376	PVC Aqua kraft type super Two Way bib tap 15 mm	No.	381
377	Super push button type cock / tap with flange 15 mm	No.	215
378	PVC Aqua kraft type super jet spray 15 mm	No.	425
379	PVC Aqua kraft type super right angle stop tap	No.	216
380	PVC Aqua kraft type super Pillar tap 15 mm	No.	313
381	Fixing in CC BK Clamp, Battan	No.	25
382	Wall Mounted European type glazed W.C.pan	No.	6680
383	Super wall sink type tap with flange 15 mm	No.	602
384	Two Way bib tap with flange	No.	382
385	super jet spray with flange 2 in 1 faucet 1.50 metre long	No.	435
Building (Bd-W : Water supply and sanitary fittings)			
1	Chlorophyriphos	Liter	256
2	Solvent	Ltr	379

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
3	D.D.V.P.	Ltr	514
4	Malathion	Ltr	288
5	Pine Oil	Ltr	460
6	S.S. Pipe 40 mm dia	Rmt	150
7	Mild Steel	M.T.	35605
8	Barbed Wire	Kg.	87
9	Concentina Coil Wire	Rmt	169
10	M.S. Steel	Kg	36
12	RCC Pole	No	276
14	Green marble	Sq.Mt	1243
15	Telephone black granite	Sq.Mt	2537
16	Karva (for roof and sides 10kg bundle)	Bundle	25
17	Tatti	Sq.Mt	20
18	Bamboo 25mm dia.	R.Mt	19
20	Lightening Conductor	No.	8835
21	Salt	Kg.	20
22	Copper Tape width 25mm*3mm thick	Kg	418
23	Aluminium Strips 50 mm x 3 mm	R.Mt	63
24	Crippled wire 3' - 0" , 4' - 0" and 5' - 0" wide	Sq.mt	209
25	Welding Electrodes	No	5.00
26	Welded Mesh 75 X 75 mm	Sqm	197
27	Welded Mesh 150 X 150 mm	Sqm	169
28	Tarat 36" width (Gunny cloth)	R.Mt	33
29	Chain link 3' - 0" , 4' - 0" and 5' - 0" wide	Sq.Mt	191
30	Bamboo 50mm dia.	R.Mt	15
31	Hold Fast for Steel Gate	No.	59.00
32	Nut Bolts 12 mm dia. /Nails all size	No.	78.00
33	M.S. Pipe 40 mm dia	Rmt	140.00
34	Welding Rod	Box	383.00
35	PVC hand rail cover	Rmt.	218.00
36	Antitermite Liquid	Kg.	3,463.00
37	Lock for Drawer/Cupboard	No.	126.00
38	Glycel	Ltr.	279.00
39	Hing	Kg.	3,075.00
40	Hot lime	Kg.	5.00
41	Ladder	No.	111.00
42	Fine tooth chisel	No.	59.00
43	Saw	No.	33.00
44	Gloves	No.	11.00
CD Works (CD : Cross Drainage Works)			
1	R.C.C.Pipe 1200mm dia.(Np3)2.5m long	R.Mt.	8395.00
2	R.C.C.Pipe 1100mm dia.(Np3)2.5m long	R.Mt.	8250.00
3	R.C.C.Pipe 1000mm dia.(Np3)2.5m long	R.Mt.	6312.00
4	R.C.C.Pipe 900mm dia.(Np3)2.5m long	R.Mt.	5683.00
5	R.C.C.Pipe 800mm dia.(Np3)2.5m long	R.Mt.	5045.00
6	R.C.C.Pipe 700mm dia.(Np3)2.5m long	R.Mt.	3952.00
7	R.C.C.Pipe 600mm dia.(Np3)2.5m long	R.Mt.	2972.00
8	R.C.C.Pipe 500mm dia.(Np3)2.5m long	R.Mt.	2236.00

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
9	R.C.C.Pipe 450mm dia.(Np3)2.5m long	R.Mt.	1980.00
10	R.C.C.pipe Np2 class 1000mm dia. 2.5m long	R.Mt.	3586.00
11	R.C.C.Np2 Pipe Collar 1000 mm Dia.	No.	356.00
12	R.C.C.pipe Np2 class 1200mm dia. 2.5m long	R.Mt.	5234.00
13	R.C.C.Np2 Pipe Collar 1200 mm Dia.	No.	514.00
14	R.C.C.pipe Np2 class 1800mm dia. 2.5m long	R.Mt.	8737.00
15	R.C.C.pipe Np2 class 900mm dia. 2.5m long	R.Mt.	3142.00
16	R.C.C.Np2 Pipe Collar 900 mm Dia.	No.	346.00
17	R.C.C.pipe Np2 class 800mm dia. 2.5m long	R.Mt.	2627.00
18	R.C.C.Np2 Pipe Collar 800 mm Dia.	No.	258.00
19	R.C.C.pipe Np2 class 700mm dia. 2.5m long	R.Mt.	2225.00
20	R.C.C.pipe Np2 class 600mm dia. 2.5m long	R.Mt.	1580.00
21	R.C.C.Np2 Pipe Collar 600 mm Dia.	No.	157.00
22	R.C.C.pipe Np2 class 500mm dia. 2.5m long	R.Mt.	1255.00
23	R.C.C.pipe Np2 class 450mm dia. 2.5m long	R.Mt.	1028.00
24	R.C.C.Np2 Pipe Collar 450 mm Dia.	No.	102.00
25	R.C.C.pipe Np2 class 100mm dia. 2m long	R.Mt.	311.00
26	R.C.C.pipe Np2 class 150mm dia. 2m long	R.Mt.	332.00
27	R.C.C.pipe Np2 class 225mm dia. 2m long	R.Mt.	373.00
28	R.C.C.pipe Np2 class 300mm dia. 2m long	R.Mt.	613.00
29	RCC Pipe Np 4 heavy duty non presure pipe 1000 mm diameter	R.Mt.	7872.00
30	RCC Pipe Np4 heavy duty non presure pipe 1200 mm	R.Mt.	9358.00
31	RCC Pipe Np4 heavy duty non presure pipe 900 mm diameter	R.Mt.	6317.00
General Rates			
1	Cement	M.T.	5500
2	Structural Steel	M.T.	44100
3	TMT FE - 500	M.T.	42600
4	HCRM/CRS Reinforcement	M.T.	46500
5	Tubular Steel	M.T.	49500
6	Bitumen VG 10 (Bulk) (80/100)	M.T.	26430
7	Bitumen VG 30 (Bulk) (60/70)	M.T.	26630
8	Bitumen VG 40 (Bulk) (30/40)	M.T.	28180
9	Bitumen VG 30 (Packed) (60/70)	M.T.	31730
10	Bitumen VG 40 (Packed) (30/40)	M.T.	34580
11	Bitumen VG 10 (Packed) (80/100)	M.T.	30930
12	Sand - Natural/V.S.I.(Vertical Shaft Impact Crusher)Quality Artificial Sand	Cu.Mt.	1575
13	Sand - Crushed	Cu.Mt.	692
14	Natural Sand - Screened (for plaster work only)	Cu.Mt.	2153
15	Bricks II Class	No.	7.00
16	Rubble stone excluding royalty	Cu.Mt.	473
17	Aggregate 40 mm (Hand Broken) Blasted excluding royalty	Cu.Mt.	675
18	Aggregate 25 mm	Cu.Mt.	900
19	Aggregate 20 mm	Cu.Mt.	900
20	Aggregate 12 mm	Cu.Mt.	900
21	Aggregate 10 mm	Cu.Mt.	900
22	Aggregate 6 mm	Cu.Mt.	900
23	Stone Dust	Cu.Mt.	700
24	Soft Murum	Cu.Mt.	223
25	Hard Murum	Cu.Mt.	225
26	Water	1000 lit.	163
27	White Cement	Kg.	24
28	Plasticizer	Ltr.	118

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
29	Stainless Steel Plate	Kg.	148
30	EMULSION RS1 (Hincol) BULK	M.T.	25963
31	EMULSION RS1 (Hincol) Packed	M.T.	32235
32	WASTE PLASTIC to be used in bituminous treatment as per IRC SP-098-2013	Kg.	53
33	Portland Slag Cement (PSC)	Bag	251
34	Ground Granulated Blast Furnance Slag (GGBS)	M.T.	4160
General (MORTH: Roads)			
1	Bitumen VG-40 (bulk (30-40 grade))	M.T.	29160
2	Stone Boulder of size 150 mm and below at Cruser Plant	Cu.Mt.	788
3	Supply of quarried stone 150 - 200 mm size for Hand Broken at site	Cu.Mt.	750
4	Boulder with minimum size of 300 mm for Pitching at Site	Cu.Mt.	750
5	Coarse sand at Mixing Plant	Cu.Mt.	1350
6	Coarse sand at Site	Cu.Mt.	1350
7	Murum at Site	Cu.Mt.	225
8	Fly ash conforming to IS: 3812 (Part II & I) atHMP Plant / Batching Plant / Crushing Plant	Cu.Mt.	1470
9	Filter media/Filter Material as per Table 300-3 (MoRT&H Specification)	Cu.Mt.	650
10	Close graded Granular sub-base Material 53 mm to 9.5 mm	Cu.Mt.	900
11	Close graded Granular sub-base Material 37.5 mm to 9.5 mm	Cu.Mt.	900
12	Close graded Granular sub-base Material 26.5 mm to 9.5 mm	Cu.Mt.	900
13	Close graded Granular sub-base Material 9.5 mm to 4.75 mm	Cu.Mt.	900
14	Close graded Granular sub-base Material 9.5 mm to 2.36 mm	Cu.Mt.	900
15	Close graded Granular sub-base Material 4.75mm to 2.36 mm	Cu.Mt.	900
16	Close graded Granular sub-base Material 4.75mm to 75 micron mm	Cu.Mt.	900
17	Close graded Granular sub-base Material 2.36 mm	Cu.Mt.	900
18	Stone crusher dust finer than 3mm with not more than 10% passing 0.075 sieve.	Cu.Mt.	800
19	Coarse graded Granular sub-base Material 2.36 mm & below	Cu.Mt.	800
20	Coarse graded Granular sub-base Material 4.75mm to 75 micron mm	Cu.Mt.	800
21	Coarse graded Granular sub-base Material 4.75 mm to 2.36 mm	Cu.Mt.	800
22	Coarse graded Granular sub-base Material 9.5 mm to 4.75 mm	Cu.Mt.	900
23	Coarse graded Granular sub-base Material 26.5 mm to 4.75 mm	Cu.Mt.	900
24	Coarse graded Granular sub-base Material 26.5 mm to 9.5 mm	Cu.Mt.	900

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
25	Coarse graded Granular sub-base Material 37.5 mm to 9.5 mm	Cu.Mt.	900
26	Coarse graded Granular sub-base Material 53 mm to 26 .5mm	Cu.Mt.	900
27	Aggregates below 5.6 mm	Cu.Mt.	900
28	Aggregates 22.4 mm to 2.36 mm	Cu.Mt.	900
29	Aggregates 22.4 mm to 5.6 mm	Cu.Mt.	900
30	Aggregates 45 mm to 2.8 mm	Cu.Mt.	900
31	Aggregates 45 mm to 22.4 mm	Cu.Mt.	900
32	Aggregates 53 mm to 2.8 mm	Cu.Mt.	900
33	Aggregates 53 mm to 22.4 mm	Cu.Mt.	900
34	Aggregates 63 mm to 2.8 mm	Cu.Mt.	900
35	Aggregates 63 mm to 45 mm	Cu.Mt.	900
36	Aggregates 90 mm to 45 mm	Cu.Mt.	900
37	Aggregates 10 mm to 5 mm	Cu.Mt.	900
38	Aggregates 11.2 mm to 0.09 mm	Cu.Mt.	900
39	Aggregates 13.2 mm to 0.09 mm	Cu.Mt.	900
40	Aggregates 13.2 mm to 5.6 mm	Cu.Mt.	900
41	Aggregates 13.2 mm to 10 mm	Cu.Mt.	900
42	Aggregates 20 mm to 10 mm	Cu.Mt.	900
43	Aggregates 25 mm to 10 mm	Cu.Mt.	900
44	Aggregates 19 mm to 6 mm	Cu.Mt.	900
45	Aggregates 37.5 mm to 19 mm	Cu.Mt.	900
46	Aggregates 37.5 mm to 25 mm	Cu.Mt.	900
47	Aggregates 6 mm nominal size	Cu.Mt.	900
48	Aggregates 10 mm nominal size	Cu.Mt.	900
49	Aggregates 13.2/12.5 mm nominal size	Cu.Mt.	900
50	Aggregates 20 mm nominal size	Cu.Mt.	900
51	Aggregates 25 mm nominal size	Cu.Mt.	900
52	Aggregates 40 mm nominal size	Cu.Mt.	900
53	Binding wire	Kg.	63
54	Bitumen (Cationic Emulsion)	M.T.	24500
55	Bitumen VG-30 (bulk (60-70 grade))	M.T.	27480
56	Bitumen VG -10 (bulk (80-100 grade))	M.T.	27280
57	Bitumen (Cutback)	M.T.	33000
58	Bitumen (emulsion)	M.T.	24245
59	Bitumen (modified graded) (bulk Cr-60)	M.T.	31118
60	Geo grids	Sq.Mt.	65
61	Geomembrane	Sq.Mt.	90
62	Geonets	Sq.Mt.	68
63	Geotextile	Sq.Mt.	58
64	Geotextile filter fabric	Sq.Mt.	53
65	LDO	Ltr.	33.21
66	Pavement Marking Paint	Ltr.	218
67	RCC Pipes 200 mm dia, 2.5 m long for drainage	R.Mt.	363
68	Quarry spall	Cum	580
69	Road Barricade Perforated fench (2000 x 1000 x 40 mm)	No.	3500
70	Road Barricade Sand Fillable only 1 mtr. [1000(L) x 350(W) x 760(H) mm]	No.	2880
Coastal Material list			
1	Polypropylene multifilament woven geotextile fabric for filter layer (approved opening size 0.075mm & water permeability 9.00 Litres/Sqm/Second)	Sqm	50
2	Polythene bags	No.	6
3	Trap stones weighing upto 20 kilogram	Cum	473

Sr. No.	Description	Per Unit	Rate (Excluding GST) SSR 2020-21
4	Trap stones weighing from 20 to 50 kilogram	Cum	473
5	Trap stones weighing from 50 to 100 kilogram	Cum	473
6	Trap stones weighing from 100 to 200 kilogram	Cum	473
7	Trap stones weighing from 200 to 300 kilogram	Cum	495
8	Trap stones weighing from 300 to 500 kilogram	Cum	495
9	Trap stones weighing from 500 to 1000 kilogram	Cum	535
10	Trap stones weighing from 1000 kilogram and above	Cum	535
11	Laterite stones rubbles upto 20 kilogram	Cum	350
12	Laterite stones rubbles from 20 to 50 kilogram	Cum	360
13	Laterite stones rubbles from 50 to 100 kilogram	Cum	363
14	Gabions boxes of mechanically woven hexagonal shaped wire mesh of type, 10 cm x 12 cm. edges mechanically selvedged (Zinc+ PVC) coated G.I. wires as per BS: 443, mesh wire dia. 3.00 mm, edge wire 3.70 mm size		
	a) Gabion size - 1.00 x 1.00 x 1.00 M	No.	1400
	b) Gabion size - 1.50 x 1.00 x 1.00 M	No.	1700
	c) Gabion size - 2.00 x 1.00 x 1.00 M	No.	2300
	d) Gabion size - 3.00 x 1.00 x 1.00 M	No.	3300
	e) Gabion size - 4.00 x 1.00 x 1.00 M	No.	4250
15	Flexible gabions of polypropylene material of 10 mm ø four strand mesh size of 150mm x 150 mm size		
	a) Gabion size - 1.00 x 1.00 x 1.00 M	No.	1125
	b) Gabion size - 1.50 x 1.00 x 1.00 M	No.	1500
	c) Gabion size - 2.00 x 1.00 x 1.00 M	No.	1325
	d) Gabion size - 3.00 x 1.00 x 1.00 M	No.	2600
16	Used tyre fender	No.	325
17	Geotextile bags of sizes		
	a) Geotextile bags size - 1.00 x 0.70 M	No.	190
	b) Geotextile bags size - 2.00 x 1.50 M	No.	1150
18	Geotextile tube of 20 metre long &		
	a) Geotextile tube diameter - 3.00 M	Rmt.	94500
	b) Geotextile tube diameter - 1.50 M	Rmt.	58500

LABOUR RATES FOR SSR For Year 2020-21

Sr. No.	Description	Per Unit	Rate
1	Black Smith With Tools - II Class	Day	592.00
2	Stone Cutter With Tools - Semi Skilled	Day	592.00
3	Mason I Class Skilled	Day	622.00
4	Mason II Class Skilled	Day	622.00
5	Carpenter I Class Skilled	Day	622.00
6	Carpenter II Class Skilled	Day	622.00
7	Plumber With Tools - Skilled	Day	622.00
8	Glazier With Tools - Skilled	Day	622.00
9	Tin Smith With Tools - Semi Skilled	Day	592.00
10	Painter I Class Skilled	Day	622.00
11	Painter II Class Skilled	Day	622.00
12	Head Fitter With Tools - Skilled	Day	622.00
13	Mechanic	Day	622.00
14	Lorry Driver / Mixer Operator	Day	622.00
15	Welder / Driller - Skilled	Day	622.00
16	Polishman - Semi Skilled	Day	592.00
17	Assistant Plumber - Skilled	Day	592.00
18	Maistry Skilled / Supervisor / Mate	Day	622.00
19	Vibrator Operator - Skilled	Day	622.00
20	Skilled Labour	Day	560.00
21	Boreman Skilled	Day	622.00
22	Asphalt Sprayer Skilled	Day	622.00
23	Minor or Blaster Semi Skilled	Day	592.00
24	Quarry Man - Semi Skilled	Day	592.00
25	Painter / White Washer - Semi Skilled	Day	592.00
26	Labour for Excavation in Hard Rock (Un Blast)	Day	560.00
27	Tile Turner Semi Skilled	Day	592.00
28	Mazdoor - For Polishing	Day	560.00
29	Bar Bender Skilled	Day	592.00
30	Bhisti (Mixing / Curing) - Semi Skilled	Day	592.00
31	Mukadam - Semi Skilled	Day	592.00
32	Tar Handler - Semi Skilled	Day	592.00
33	Helper Un Skilled	Day	592.00
34	Tree Cutter - Semi Skilled	Day	592.00
35	Navaghani	Day	592.00
36	Mazdoor - Unskilled Heavy Male	Day	560.00
37	Mazdoor - Unskilled Heavy Female	Day	560.00
38	Below Boy	Day	560.00
39	Fitter With Tools I Class Skilled	Day	622.00
40	Fitter With Tools II Class Skilled	Day	592.00

LABOUR RATES FOR SSR For Year 2020-21

Sr. No.	Description	Per Unit	Rate
41	Gun Man for Guniting	Day	622.00
42	Laboratory Assistant	Day	622.00
43	Labour for Tile Turning	Day	560.00
44	Excavator - Unskilled Heavy	Day	560.00
45	Breaker - Semi Skilled	Day	592.00
46	Hole Driller Semi Skilled	Day	592.00
47	Chiseler Semi Skilled	Day	592.00
48	Foreman Skilled	Day	622.00
49	Bandhani Semi Skilled	Day	592.00
50	Emgraver for lettering Skilled	Day	622.00
51	Frabi - Weld - Drilling	Day	592.00
52	Khalashi / Diers	Day	622.00
53	Jack Hammer Operator	Day	622.00
54	Electrician	Day	622.00
55	Welder Skilled	Day	622.00
56	Labour for Traffic Regulation	Day	560.00
57	Watchman	Day	560.00
58	Compressor Operator / Driver	Day	622.00
59	Supervisor / Mate	Day	622.00
60	Blacksmith (1st Class) Welder / Plumber / Electrician.	Day	622.00
61	Blaster (Stone Cutter)	Day	560.00
62	Mali	Day	592.00
63	Mazdoor / Dresser (Semi Skilled)	Day	592.00
64	Mazdoor / Dresser Sinker B116 Skilled	Day	592.00
65	Medical Officer	Day	2220.00
66	Operator (grouting)	Day	622.00
67	Para Medical Personnel	Day	1110.00
68	Mazdoor unskilled female (light)	Day	592.00
69	Painting Lettering Number	Day	592.00
70	Junior Engineer	Day	1560.00
71	Surveyor	Day	1075.00
72	Autocad Operator	Day	1560.00
73	Attendent	Day	560.00
74	Computer Typist	Day	840.00
75	Tracer	Day	1075.00
76	Total Station Operator	Day	1560.00
77	Senior Engineer	Day	2275.00
78	Assistant	Day	840.00
79	Operator / Fitter	Day	622.00
80	Mazdoor Unskilled Light Male	Day	560.00

LABOUR RATES FOR SSR For Year 2020-21

Sr. No.	Description	Per Unit	Rate
81	Computer Operator	Day	950.00
82	Survey Helper	Day	560.00
83	Technician	Day	2275.00
84	Skilled Assistants-on the site	Day	622.00
85	Supervisor	Day	1075.00
86	Valuation expert	Day	1890.00
87	Office support Staff	Day	560.00
88	Co-ordinator	Day	1260.00
89	Senior Surveyor	Day	1075.00
90	Revenue expert	Day	1260.00
91	Welder	Day	592.00

(A) Usage Rates of Plant and machinery for Year 2020-21

Sr.No.	Description of Machine	Unit	Cap.	Rate
1	2	3	4	5
A	Earthmoving Machinery			
1	Dozer D-8 H (Heavy)	Hour	270 HP	3005.00
2	Dozer D 80 A 12 (Medium)	Hour	180 Hp	2099.00
3	Dozer D-3 B (Medium)	Hour	65 HP	1267.00
4	Hydraulic Excavator (BEML BE 200, Tata Hitachi EX200 or	Hour	0.9 Cum	1748.00
5	Hydraulic Excavator (BEML BE 200, Tata Hitachi EX200 or	Day	0.9 Cum	13984.00
6	Excavator (JCB JS140/Tata Hitachi EX120 or equivalent))	Hour	0.6 Cum	1298.00
7	Excavator (JCB JS140/Tata Hitachi EX120)	Day	0.6 Cum	10384.00
8	Hydraulic Excavator (wheeled)	Hour	0.3 Cum	968.00
9	Hydraulic Excavator (wheeled)	Day	0.3 Cum	7744.00
10	Loader 1 cum bucket capacity	Hour	1 Cum	968.00
11	Loader 1 cum bucket capacity	Day	1 Cum	7744.00
12	Motor grader 3.35 mtr Blade	Hour	145 Hp	1576.00
13	Tandem Vibratory Road Roller 8 tonne	Hour	8 Tonn	1591.00
14	Static Road Roller 8 tonne	Hour	8 Tonn	691.00
15	Pneumatic Road Roller	Hour	8 Tonn	1000.00
16	Tipper -10 cum	Km.	10 Cum	60.00
17	Tipper -10 cum (20 Km/Hr)	Hour	10 Cum	1200.00
18	Tipper -6 cum	Km.	6 Cum	42.00
19	Tipper -6 cum	t.km	6 Cum	4.20
20	Tipper -6 cum (20 Km/Hr)	Hour	6 Cum	848.00
21	Tipper -3.5 cum	Km.	3.5 Cum	38.00
22	Tipper -3.5 cum (20 Km/Hr)	Hour	3.5 Cum	755.00
23	Tractor	Hour	35 HP	330.00
24	Tractor with rotevator	Hour	35 HP	350.00
25	Tractor with Ripper	Hour	35 HP	600.00
26	Water Tanker	Hour	9000 Liter	675.00
27	Water Tanker (15 km per Hour)	Km.	9000 Liter	45.00
B	Asphalt / Road Machinery			
28	Air Compressor 175 cfm	Hour	175 cfm	565.00
29	Air Compressor 510 cfm	Hour	510 cfm	653.00
30	Bitumen Pressure Distributor (Spray Bar Width 4.5 Mtr.)	Hour	4 to 9 KLtr.	1158.00
31	Bitumen Boiler oil fired	Hour	2000 Ltr.	205.00
32	Emulsion Pressure Distrubutor	Hour	4 to 9 KLtr.	968.00
33	Hot Mix Plant 90-120 TPH capacity (Drum Mix Plant) with SCADA	Hour	90 TPH	13000.00
34	Hot Mix Plant 60-90 TPH capacity (Drum Mix Plant) with SCADA	Hour	60 TPH	11000.00

Sr.No.	Description of Machine	Unit	Cap.	Rate
1	2	3	4	5
35	Hot Mix Plant 40-60 TPH capacity (Drum Mix Plant) with SCADA	Hour	40 TPH	10000.00
36	Hydraulic chip Spreader (3 Mtr.Width)	Hour	3 Mtr.	410.00
37	Integrated Stone Crusher 100 TPH	Hour	100 TPH	12000.00
38	Integrated Stone Crusher 200 TPH	Hour	200 TPH	15000.00
39	Mastic Cooker	Hour		925.00
40	Mechanical Broom Hydraulic (Width 2.25 Mtr.)	Hour	2.25 Mtr.	360.00
41	Motor grader 3.35 mtr Blade	Hour	145 HP	1800.00
42	Paver Finisher Hydrostatic with sensor control 100TPH	Hour	100 TPH	3000.00
43	Paver Finisher Mechanical 100 TPH	Hour	100 TPH	1200.00
44	Pot Hole Repair kit mounted on truck	Hour		400.00
45	Road Marking Machine	Hour		105.00
46	Batch Mix Asphalt Plant 160 TPH with SCADA	Hour	160 TPH	30000.00
47	Batch Mix Asphalt Plant 120 TPH with SCADA	Hour	120 TPH	25000.00
48	Batch Mix Asphalt Plant 80 TPH with SCADA	Hour	80 TPH	20000.00
49	Dumper 6 cum Capacity with VTS	Hour	6 Cum	875.00
50	Loader 1.00 cum Bucket capacity	Hour	1.00 Cum	968.00
51	Loader 1.00 cum Bucket capacity	Day	1.00 Cum	7744.00
C	Concrete Machinery			
52	Batching and mixing plant (a) 30 cum capacity with SCADA	Hour	30 cum	1750.00
53	Batching and mixing plant (b) 15-20 cum capacity with SCADA	Hour	15-20 cum	1500.00
54	Concrete Paver Finisher with 40 HP Motor	Hour		2594.00
55	Concrete Pump of 45 & 30 cum capacity	Hour	30 - 45 cum	721.00
56	Concrete Bucket	Hour	1 cum	50.00
57	Concrete Mixer (a) 0.28 - 04 cum	Hour	0.28 - 04 cum	450.00
58	Concrete Mixer (b) 1 cum	Hour	1 cum	600.00
59	Reversible drum concrete mixer with SCADA	Hour	1 Cum	698.00
60	Transit Mixer 4.0/4.5 cum	Hour	4 - 4.5 cum	1399.00
61	Transit Mixer 4/4.5 cum	t.km	4 - 4.5 cum	10.00
62	Transit Mixer 3.0 cum	Hour	3 cum	1100.00
63	Transit Mixer 3.0 cum	t.km	3 cum	8.00
64	Cement concrete batch mix plant @ 175 cum per hour (effective output) with SCADA	Hour	175 cum	10500.00
65	Cement concrete batch mix plant @ 75 cum per hour with SCADA	Hour	75 cum	6500.00
66	Wet Mix Plant 100 TPH	Hour	100 TPH	4000.00
67	Wet Mix Plant 75 TPH	Hour	75 TPH	3000.00
68	Wet Mix plant 60 TPH	Hour	60 TPH	1750.00
69	Vibrator (Electrical)	Hour		157.00
70	Vibrator (Diesel)	Day		960.00

Sr.No.	Description of Machine	Unit	Cap.	Rate
1	2	3	4	5
D	Other Allied Machinery			
71	Crane (a) 80 tonnes	Hour	80 Tonnes	2700.00
72	Crane 40 tonne capacity	Hour	40 Tonnes	2394.00
73	Crane 20 tonne capacity	Hour	20 Tonnes	2025.00
74	Crane 15 tonne capacity	Hour	15 Tonnes	1772.00
75	Crane 10 tonne capacity	Hour	10 Tonnes	1000.00
76	Crane 5 tonne capacity	Hour	5 Tonne	494.00
77	Cranes (c) 3 tonnes	Hour	3 Tonnes	345.00
78	Generator (a) 125 KVA	Hour	125 kva	1065.00
79	Generator (b) 63 KVA	Hour	63 kva	526.00
80	GSB Plant 50 cum	Hour	50 Cum	1737.00
81	Kerb Casting Machine	Hour		532.00
82	Piling Rig with Bantonite Pump	Hour		4500.00
83	Ripper	Hour		25.00
84	Rotavator	Hour		20.00
85	Truck 5.5 cum per 10 tonnes	Km.		34.00
86	Truck 5.5 cum per 10 tonnes	Hour		680.00
87	Truck 5.5 cum per 10 tonnes	t.km		3.63
88	Air Compressor with pneumatic chisel attachment for cutting hard clay	Hour		900.00
89	Belt conveyor system	Hour		125.00
90	Boat to carry atleast 20 persons	Hour		550.00
91	Cold mining machine @ 20 cum per hour	Hour		150.00
92	Compressor with guniting equipment along with accessories	Hour		900.00
93	Generator 33 KVA	Hour	33 KVA	394.00
94	Generator 100 KVA	Hour	100 KVA	794.00
95	Generator 250 KVA	Hour	250 KVA	2000.00
96	Generator 325 KVA	Hour	325 KVA	2500.00
97	Joint cutting machine with 2-3 blades (for rigid pavement)	Hour		800.00
98	Jack for lifting 40 tonne capacity	Day	40 Tonnes	3000.00
99	Piling ring including double acting pile driving hammer (Hydraulic ring)	Hour		4500.00
100	Plate Compactor	Hour		150.00
101	Texturing machine (for rigid pavement)	Hour		145.00
102	Truck Trailor 30 tonne capacity	Hour		1065.00
103	Truck Trailor 30 tonne capacity	t.km		3.00
104	Vibrating Pile driving hammer complete with power unit and accessories	Hour		4500.00
105	Pile boring machinery 325-400 mm dia.	R.Mt		186.00
106	Pumping Charges	Cmt		210.00
107	Pile Boring Machine 325 to 400 mm	Day		4110.00

Sr.No.	Description of Machine	Unit	Cap.	Rate
1	2	3	4	5
108	Pile Boaring Machine 425 to 500 mm	Day		4280.00
109	Pile Boaring Machine 525 to 600 mm	Day		4762.00
110	Pile Boaring Machine 625 to 700 mm	Day		5713.00
111	Pile Boaring Machine 725 to 1050 mm	Day		6200.00
112	Bentonite Pump	Day		75.00
113	Guiniting Gun	Hour		259.00
114	Chain and pully	Day		250.00
115	Welding machine	Day		350.00
116	Electric drill machin	Day		350.00
117	Electric gas cutting	Day		245.00
118	Rammer	Hour		156.00
119	Polishing machine with Polishman	Day		771.00
120	Tile Cutting Machine	Hour		30.00
121	Hand polishing with Polishman	Day		580.00
122	TilePolishing machine(Grinder)	Day		185.00

**Asstt. Chief Engineer,(Mech.)
Public Works, Region, Pune**

STATEMENT - C (With Machine Loading)
(FOR YEAR 2020-2021) Maharashtra

Cost of Diesel (As on 30-06-2020)

77.37 Per Litre

Cost of mobile Oil (As on 30-06-2020)

300 Per Litre

Hire charges of Loader

569 Per trip (Rate of Loader Rs.968/- per Hr. with 85% bucket effi., Cycle time 6 minutes)

Carrage of material over distance exceeding 0.50 km. including loading and unloading.

Lead in Km	Av.Speed Km/Hrs	Factor	No. of Trips	Km done	Qty of Diesel= 4Km/Ltr	Cost of Diesel	Qty of mobile oil in Ltr	Cost of mobile oil@300/Ltr	Hire Charges of Truck@ Rs. 2200 per Day	Total cost	add 10% Overhead Charges	Gross Total of 12+13	Cost per Trip=(Col 13/4)	Cost of loader per trip of tipper	Total Cost	Lead in km
L	S	F	$N=8/((F*(L/S))+1)$	$(2*NL)+6$												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
0.50	15.00	2.00	7.50	13.50	3.38	261.51	0.076	22.82	2200.00	2484.33	248.43	2732.76	364.37	569.00	933.37	0.50
1.00	16.00	2.00	7.11	20.22	5.06	391.49	0.114	34.16	2200.00	2625.65	262.57	2888.22	406.16	569.00	975.16	1.00
1.50	16.50	2.00	6.77	26.31	6.58	509.09	0.148	44.42	2200.00	2753.51	275.35	3028.86	447.45	569.00	1016.45	1.50
2.00	17.00	2.00	6.48	31.90	7.98	617.41	0.180	53.87	2200.00	2871.28	287.13	3158.41	487.70	569.00	1056.70	2.00
2.50	17.25	2.00	6.20	37.01	9.25	715.67	0.208	62.44	2200.00	2978.11	297.81	3275.92	528.18	569.00	1097.18	2.50
3.00	17.50	2.00	5.96	41.74	10.44	807.74	0.235	70.47	2200.00	3078.21	307.82	3386.03	568.37	569.00	1137.37	3.00
3.50	17.75	2.00	5.74	46.16	11.54	892.85	0.260	77.90	2200.00	3170.75	317.08	3487.83	607.91	569.00	1176.91	3.50
4.00	18.00	2.00	5.54	50.31	12.58	973.31	0.283	84.92	2200.00	3258.23	325.82	3584.05	647.12	569.00	1216.12	4.00
4.50	18.25	2.00	5.36	54.22	13.56	1049.14	0.305	91.53	2200.00	3340.67	334.07	3674.74	685.87	569.00	1254.87	4.50
5.00	18.50	2.00	5.19	57.93	14.48	1120.32	0.326	97.74	2200.00	3418.06	341.81	3759.87	724.03	569.00	1293.03	5.00
5.50	18.50	2.00	5.02	61.19	15.30	1183.76	0.344	103.28	2200.00	3487.04	348.70	3835.74	764.56	569.00	1333.56	5.50
6.00	18.75	2.00	4.88	64.54	16.13	1247.98	0.363	108.88	2200.00	3556.86	355.69	3912.55	802.07	569.00	1371.07	6.00
6.50	18.85	2.00	4.73	67.55	16.89	1306.78	0.380	114.01	2200.00	3620.79	362.08	3982.87	841.21	569.00	1410.21	6.50
7.00	19.00	2.00	4.61	70.48	17.62	1363.26	0.396	118.94	2200.00	3682.20	368.22	4050.42	879.37	569.00	1448.37	7.00
7.50	19.15	2.00	4.49	73.29	18.32	1417.42	0.412	123.66	2200.00	3741.08	374.11	4115.19	917.32	569.00	1486.32	7.50
8.00	19.30	2.00	4.37	75.98	19.00	1470.03	0.428	128.25	2200.00	3798.28	379.83	4178.11	955.23	569.00	1524.23	8.00

Lead in Km	Av.Speed Km/Hrs	Factor	No. of Trips	Km done	Qty of Diesel= 4Km/Ltr	Cost of Diesel	Qty of mobile oil in Ltr	Cost of mobile oil@300/Ltr	Hire Charges of Truck@ Rs. 2200 per Day	Total cost	add 10% Overhead Charges	Gross Total of 12+13	Cost per Trip=(Col 13/4)	Cost of loader per trip of tipper	Total Cost	Lead in km
L	S	F	$N=8/((F*(L/S))+1)$	(2*NL)+6												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
8.50	19.45	2.00	4.27	78.57	19.64	1519.55	0.442	132.57	2200.00	3852.12	385.21	4237.33	992.61	569.00	1561.61	8.50
9.00	19.60	2.00	4.17	81.06	20.27	1568.29	0.456	136.82	2200.00	3905.11	390.51	4295.62	1030.07	569.00	1599.07	9.00
9.50	19.80	2.00	4.08	83.57	20.89	1616.26	0.470	141.01	2200.00	3957.27	395.73	4353.00	1066.27	569.00	1635.27	9.50
10.00	20.00	2.00	4.00	86.00	21.50	1663.46	0.484	145.13	2200.00	4008.59	400.86	4409.45	1102.36	569.00	1671.36	10.00
11.00	21.00	2.00	3.91	91.95	22.99	1778.74	0.517	155.18	2200.00	4133.92	413.39	4547.31	1163.89	569.00	1732.89	11.00
12.00	22.00	2.00	3.83	97.83	24.46	1892.47	0.550	165.11	2200.00	4257.58	425.76	4683.34	1224.05	569.00	1793.05	12.00
13.00	23.00	2.00	3.76	103.63	25.91	2004.66	0.583	174.89	2200.00	4379.55	437.96	4817.51	1282.92	569.00	1851.92	13.00
14.00	24.00	2.00	3.69	109.38	27.35	2116.07	0.615	184.61	2200.00	4500.68	450.07	4950.75	1340.83	569.00	1909.83	14.00
15.00	25.00	2.00	3.64	115.09	28.77	2225.93	0.647	194.20	2200.00	4620.13	462.01	5082.14	1397.59	569.00	1966.59	15.00
20.00	25.00	2.00	3.08	129.08	32.27	2496.73	0.726	217.82	2200.00	4914.55	491.46	5406.01	1756.95	569.00	2325.95	20.00
25.00	25.00	2.00	2.67	139.33	34.83	2694.80	0.784	235.10	2200.00	5129.90	512.99	5642.89	2116.08	569.00	2685.08	25.00
30.00	30.00	2.00	2.67	166.00	41.50	3210.86	0.934	280.13	2200.00	5690.99	569.10	6260.09	2347.53	569.00	2916.53	30.00
35.00	30.00	2.00	2.40	174.00	43.50	3365.60	0.979	293.63	2200.00	5859.23	585.92	6445.15	2685.48	569.00	3254.48	35.00
40.00	30.00	2.00	2.18	180.55	45.14	3492.48	1.016	304.70	2200.00	5997.18	599.72	6596.90	3023.58	569.00	3592.58	40.00
45.00	30.00	2.00	2.00	186.00	46.50	3597.71	1.046	313.88	2200.00	6111.59	611.16	6722.75	3361.38	569.00	3930.38	45.00
50.00	30.00	1.75	2.04	210.26	52.56	4066.57	1.183	354.78	2200.00	6621.35	662.14	7283.49	3565.88	569.00	4134.88	50.00
60.00	35.00	1.75	2.00	246.00	61.50	4758.26	1.384	415.13	2200.00	7373.39	737.34	8110.73	4055.37	569.00	4624.37	60.00
70.00	35.00	1.75	1.78	254.89	63.72	4930.02	1.434	430.11	2200.00	7560.13	756.01	8316.14	4677.83	569.00	5246.83	70.00
80.00	35.00	1.75	1.60	262.00	65.50	5067.74	1.474	442.13	2200.00	7709.87	770.99	8480.86	5300.54	569.00	5869.54	80.00
90.00	35.00	1.75	1.45	267.82	66.95	5179.92	1.506	451.91	2200.00	7831.83	783.18	8615.01	5922.82	569.00	6491.82	90.00

Lead in Km	Av.Speed Km/Hrs	Factor	No. of Trips	Km done	Qty of Diesel= 4Km/Ltr	Cost of Diesel	Qty of mobile oil in Ltr	Cost of mobile oil@300/Ltr	Hire Charges of Truck@ Rs. 2200 per Day	Total cost	add 10% Overhead Charges	Gross Total of 12+13	Cost per Trip=(Col 13/4)	Cost of loader per trip of tipper	Total Cost	Lead in km
L	S	F	$N=8/((F*(L/S))+1)$	$(2*NL)+6$												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
100.00	35.00	1.75	1.33	272.67	68.17	5274.31	1.534	460.15	2200.00	7934.46	793.45	8727.91	6545.93	569.00	7114.93	100.00
125.00	40.00	1.50	1.41	357.65	89.41	6917.65	2.012	603.52	2200.00	9721.17	972.12	10693.29	7602.26	569.00	8171.26	125.00
150.00	40.00	1.50	1.21	368.26	92.07	7123.46	2.072	621.47	2200.00	9944.93	994.49	10939.42	9059.21	569.00	9628.21	150.00
175.00	40.00	1.25	1.24	438.85	109.71	8488.26	2.468	740.54	2200.00	11428.80	1142.88	12571.68	10165.38	569.00	10734.38	175.00
200.00	40.00	1.25	1.10	447.38	111.84	8653.06	2.516	754.92	2200.00	11607.98	1160.80	12768.78	11571.71	569.00	12140.71	200.00
250.00	40.00	1.25	0.91	459.90	114.98	8896.00	2.587	776.12	2200.00	11872.12	1187.21	13059.33	14385.67	569.00	14954.67	250.00
300.00	40.00	1.25	0.77	468.65	117.16	9064.67	2.636	790.83	2200.00	12055.50	1205.55	13261.05	17197.92	569.00	17766.92	300.00
350.00	40.00	1.25	0.67	475.11	118.78	9190.01	2.673	801.77	2200.00	12191.78	1219.18	13410.96	20011.67	569.00	20580.67	350.00
400.00	40.00	1.25	0.59	480.07	120.02	9285.95	2.700	810.14	2200.00	12296.09	1229.61	13525.70	22824.62	569.00	23393.62	400.00
500.00	40.00	1.25	0.48	487.20	121.80	9423.67	2.741	822.15	2200.00	12445.82	1244.58	13690.40	28450.36	569.00	29019.36	500.00
600.00	40.00	1.25	0.41	492.08	123.02	9518.06	2.768	830.39	2200.00	12548.45	1254.85	13803.30	34076.90	569.00	34645.90	600.00
700.00	40.00	1.25	0.35	495.62	123.90	9586.14	2.788	836.33	2200.00	12622.47	1262.25	13884.72	39701.62	569.00	40270.62	700.00
800.00	40.00	1.25	0.31	498.31	124.58	9638.75	2.803	840.92	2200.00	12679.67	1267.97	13947.64	45329.83	569.00	45898.83	800.00
900.00	40.00	1.25	0.27	500.42	125.11	9679.76	2.815	844.49	2200.00	12724.25	1272.43	13996.68	50956.66	569.00	51525.66	900.00
1000.00	40.00	1.25	0.25	502.12	125.53	9712.26	2.824	847.33	2200.00	12759.59	1275.96	14035.55	56580.81	569.00	57149.81	1000.00

Asst. Chief Engineer (Mech.)
P. W. Region,Pune

STATEMENT - C 1 (With Machine Loading)
(FOR YEAR 2020-2021) Maharashtra

Cost of Diesel (As on 30-06-2020)

77.37 Per Litre

Cost of mobile Oil (As on 30-06-2020)

300 Per Litre

Hire charges of Loader

569 Per trip (Rate of Loader Rs.968/- per Hr. with 85% bucket effi., Cycle time 6 minutes)

Carrage of material over distance exceeding 0.50 km. including loading and unloading.

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Murrum, Building Rubish, Earth		Manure Sludge		Excavated Rock soling stone		Sand, Stone below 40 mm, Normal Brick sider aggre. Timber		Stone aggregate 40mm Normal size and above	
			Unit Cum		Unit Cum		Unit Cum		Unit Cum		Unit Cum	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			6.00		5.45		4.70		5.75		6	
0.50	933.37	41.70	155.56	6.95	171.26	7.65	198.59	8.87	162.33	7.25	155.56	6.95
1.00	975.16	65.85	162.53	10.98	178.93	12.08	207.48	14.01	169.59	11.45	162.53	10.98
1.50	1016.45	89.94	169.41	14.99	186.50	16.50	216.27	19.14	176.77	15.64	169.41	14.99
2.00	1056.70	113.95	176.12	18.99	193.89	20.91	224.83	24.24	183.77	19.82	176.12	18.99
2.50	1097.18	138.05	182.86	23.01	201.32	25.33	233.44	29.37	190.81	24.01	182.86	23.01
3.00	1137.37	162.09	189.56	27.02	208.69	29.74	241.99	34.49	197.80	28.19	189.56	27.02
3.50	1176.91	186.19	196.15	31.03	215.95	34.16	250.41	39.61	204.68	32.38	196.15	31.03
4.00	1216.12	210.12	202.69	35.02	223.14	38.55	258.75	44.71	211.50	36.54	202.69	35.02
4.50	1254.87	234.09	209.15	39.02	230.25	42.95	266.99	49.81	218.24	40.71	209.15	39.02
5.00	1293.03	258.16	215.51	43.03	237.25	47.37	275.11	54.93	224.87	44.90	215.51	43.03
5.50	1333.56	282.20	222.26	47.03	244.69	51.78	283.74	60.04	231.92	49.08	222.26	47.03

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Murrum, Building Rubish, Earth		Manure Sludge		Excavated Rock soling stone		Sand, Stone below 40 mm, Normal Brick sider aggre. Timber		Stone aggregate 40mm Normal size and above	
			Unit Cum		Unit Cum		Unit Cum		Unit Cum		Unit Cum	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			6.00		5.45		4.70		5.75		6	
6.00	1371.07	306.04	228.51	51.01	251.57	56.15	291.72	65.11	238.45	53.22	228.51	51.01
6.50	1410.21	330.02	235.04	55.00	258.75	60.55	300.04	70.22	245.25	57.39	235.04	55.00
7.00	1448.37	354.07	241.40	59.01	265.76	64.97	308.16	75.33	251.89	61.58	241.40	59.01
7.50	1486.32	377.96	247.72	62.99	272.72	69.35	316.24	80.42	258.49	65.73	247.72	62.99
8.00	1524.23	401.89	254.04	66.98	279.68	73.74	324.30	85.51	265.08	69.89	254.04	66.98
8.50	1561.61	425.82	260.27	70.97	286.53	78.13	332.26	90.60	271.58	74.06	260.27	70.97
9.00	1599.07	449.79	266.51	74.97	293.41	82.53	340.23	95.70	278.10	78.22	266.51	74.97
9.50	1635.27	473.55	272.55	78.93	300.05	86.89	347.93	100.76	284.39	82.36	272.55	78.93
10.00	1671.36	497.36	278.56	82.89	306.67	91.26	355.61	105.82	290.67	86.50	278.56	82.89
11.00	1732.89	544.54	288.82	90.76	317.96	99.92	368.70	115.86	301.37	94.70	288.82	90.76
12.00	1793.05	591.43	298.84	98.57	329.00	108.52	381.50	125.84	311.83	102.86	298.84	98.57
13.00	1851.92	638.37	308.65	106.40	339.80	117.13	394.03	135.82	322.07	111.02	308.65	106.40
14.00	1909.83	685.34	318.31	114.22	350.43	125.75	406.35	145.82	332.14	119.19	318.31	114.22
15.00	1966.59	732.12	327.77	122.02	360.84	134.33	418.42	155.77	342.02	127.33	327.77	122.02
20.00	2325.95	970.39	387.66	161.73	426.78	178.05	494.88	206.47	404.51	168.76	387.66	161.73

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Murrum, Building Rubish, Earth		Manure Sludge		Excavated Rock soling stone		Sand, Stone below 40 mm, Normal Brick sider aggre. Timber		Stone aggregate 40mm Normal size and above	
			Unit Cum		Unit Cum		Unit Cum		Unit Cum		Unit Cum	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			6.00		5.45		4.70		5.75		6	
25.00	2685.08	1208.81	447.51	201.47	492.68	221.80	571.29	257.19	466.97	210.23	447.51	201.47
30.00	2916.53	1439.96	486.09	239.99	535.14	264.21	620.54	306.37	507.22	250.43	486.09	239.99
35.00	3254.48	1677.14	542.41	279.52	597.15	307.73	692.44	356.84	566.00	291.68	542.41	279.52
40.00	3592.58	1914.31	598.76	319.05	659.19	351.25	764.38	407.30	624.80	332.92	598.76	319.05
45.00	3930.38	2151.37	655.06	358.56	721.17	394.75	836.25	457.74	683.54	374.15	655.06	358.56
50.00	4134.88	2381.34	689.15	396.89	758.69	436.94	879.76	506.67	719.11	414.15	689.15	396.89
60.00	4624.37	2845.36	770.73	474.23	848.51	522.08	983.91	605.40	804.24	494.85	770.73	474.23
70.00	5246.83	3316.60	874.47	552.77	962.72	608.55	1116.35	705.66	912.49	576.80	874.47	552.77
80.00	5869.54	3788.03	978.26	631.34	1076.98	695.05	1248.84	805.96	1020.79	658.79	978.26	631.34
90.00	6491.82	4259.66	1081.97	709.94	1191.16	781.59	1381.24	906.31	1129.01	740.81	1081.97	709.94
100.00	7114.93	4730.96	1185.82	788.49	1305.49	868.07	1513.81	1006.59	1237.38	822.78	1185.82	788.49
125.00	8171.26	5882.01	1361.88	980.34	1499.31	1079.27	1738.57	1251.49	1421.09	1022.96	1361.88	980.34
150.00	9628.21	7054.61	1604.70	1175.77	1766.64	1294.42	2048.56	1500.98	1674.47	1226.89	1604.70	1175.77
175.00	10734.38	8208.48	1789.06	1368.08	1969.61	1506.14	2283.91	1746.49	1866.85	1427.56	1789.06	1368.08
200.00	12140.71	9379.39	2023.45	1563.23	2227.65	1720.99	2583.13	1995.61	2111.43	1631.20	2023.45	1563.23

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Murrum, Building Rubish, Earth		Manure Sludge		Excavated Rock soling stone		Sand, Stone below 40 mm, Normal Brick sider aggre. Timber		Stone aggregate 40mm Normal size and above	
			Unit Cum		Unit Cum		Unit Cum		Unit Cum		Unit Cum	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			6.00		5.45		4.70		5.75		6	
250.00	14954.67	11719.03	2492.45	1953.17	2743.98	2150.28	3181.84	2493.41	2600.81	2038.09	2492.45	1953.17
300.00	17766.92	14060.06	2961.15	2343.34	3259.99	2579.83	3780.20	2991.50	3089.90	2445.23	2961.15	2343.34
350.00	20580.67	16400.26	3430.11	2733.38	3776.27	3009.22	4378.87	3489.42	3579.25	2852.22	3430.11	2733.38
400.00	23393.62	18741.66	3898.94	3123.61	4292.41	3438.84	4977.37	3987.59	4068.46	3259.42	3898.94	3123.61
500.00	29019.36	23422.17	4836.56	3903.70	5324.65	4297.65	6174.33	4983.44	5046.85	4073.42	4836.56	3903.70

**Asst. Chief Engineer (Mech.)
P. W. Region,Pune**

STATEMENT - C (With Manual Loading)
(FOR YEAR 2020-2021) Maharashtra

Cost of Diesel (As on 30-06-2020)
 Cost of mobile Oil (As on 30-06-2020)
 Labour Charges of mazdoor

77.37 Per Litre
 300 Per Litre
 560 Per Labour

Carrage of material over distance exceeding 0.50 km. including loading and unloading.

Lead in Km	Av.Speed Km/Hrs	Factor	No. of Trips	Km done	Qty of Diesel= 4Km/Ltr	Cost of Diesel	Qty of mobile oil in Ltr	Cost of mobile oil@300/Ltr	Cost of 6 Mazdoor @560/lbr	Hire Charges of Truck@Rs. 2200 per day	Total cost	add 10% Overhead Charges	Gross Total of 12+13	Cost per Trip=(Col 14/4)	Lead in km	Fuel Component	Cost Per trip 10 MT
L	S	F	$N=8/((F*(L/S))+1)$	$(2*NL)+6$													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
0.50	15.00	2.00	7.5	13.50	3.38	261.51	0.076	22.82	3360.00	2200.00	5844.33	584.43	6428.76	857.17	0.50	41.70	857.17
1.00	16.00	2.00	7.11	20.22	5.06	391.49	0.114	34.16	3360.00	2200.00	5985.65	598.57	6584.22	926.05	1.00	65.85	926.05
1.50	16.50	2.00	6.77	26.31	6.58	509.09	0.148	44.42	3360.00	2200.00	6113.51	611.35	6724.86	993.33	1.50	89.94	993.33
2.00	17.00	2.00	6.48	31.92	7.98	617.41	0.180	53.87	3360.00	2200.00	6231.28	623.13	6854.41	1057.78	2.00	113.95	1057.78
2.50	17.25	2.00	6.20	37.00	9.25	715.67	0.208	62.44	3360.00	2200.00	6338.11	633.81	6971.92	1124.5	2.50	138.05	1124.50
3.00	17.50	2.00	5.96	41.76	10.44	807.74	0.235	70.47	3360.00	2200.00	6438.21	643.82	7082.03	1188.26	3.00	162.09	1188.26
3.50	17.75	2.00	5.74	46.18	11.55	893.62	0.260	77.96	3360.00	2200.00	6531.58	653.16	7184.74	1251.7	3.50	186.19	1251.70
4.00	18.00	2.00	5.54	50.32	12.58	973.31	0.283	84.92	3360.00	2200.00	6618.23	661.82	7280.05	1314.09	4.00	210.12	1314.09
4.50	18.25	2.00	5.36	54.24	13.56	1049.14	0.305	91.53	3360.00	2200.00	6700.67	670.07	7370.74	1375.14	4.50	234.09	1375.14
5.00	18.50	2.00	5.19	57.90	14.48	1120.32	0.326	97.74	3360.00	2200.00	6778.06	677.81	7455.87	1436.58	5.00	258.16	1436.58
5.50	18.50	2.00	5.02	61.22	15.31	1184.53	0.344	103.34	3360.00	2200.00	6847.87	684.79	7532.66	1500.53	5.50	282.20	1500.53
6.00	18.75	2.00	4.88	64.56	16.14	1248.75	0.363	108.95	3360.00	2200.00	6917.70	691.77	7609.47	1559.32	6.00	306.04	1559.32
6.50	18.85	2.00	4.73	67.49	16.87	1305.23	0.380	113.87	3360.00	2200.00	6979.10	697.91	7677.01	1623.05	6.50	330.02	1623.05
7.00	19.00	2.00	4.61	70.54	17.64	1364.81	0.397	119.07	3360.00	2200.00	7043.88	704.39	7748.27	1680.75	7.00	354.07	1680.75
7.50	19.15	2.00	4.49	73.35	18.34	1418.97	0.413	123.80	3360.00	2200.00	7102.77	710.28	7813.05	1740.10	7.50	377.96	1740.10
8.00	19.30	2.00	4.37	75.92	18.98	1468.48	0.427	128.12	3360.00	2200.00	7156.60	715.66	7872.26	1801.43	8.00	401.89	1801.43
8.50	19.45	2.00	4.27	78.59	19.65	1520.32	0.442	132.64	3360.00	2200.00	7212.96	721.30	7934.26	1858.14	8.50	425.82	1858.14
9.00	19.60	2.00	4.17	81.06	20.27	1568.29	0.456	136.82	3360.00	2200.00	7265.11	726.51	7991.62	1916.46	9.00	449.79	1916.46
9.50	19.80	2.00	4.08	83.52	20.88	1615.49	0.470	140.94	3360.00	2200.00	7316.43	731.64	8048.07	1972.57	9.50	473.55	1972.57

Lead in Km	Av.Speed Km/Hrs	Factor	No. of Trips	Km done	Qty of Diesel= 4Km/Ltr	Cost of Diesel	Qty of mobile oil in Ltr	Cost of mobile oil@300/Ltr	Cost of 6 Mazdoor @560/lbr	Hire Charges of Truck@Rs. 2200 per day	Total cost	add 10% Overhead Charges	Gross Total of 12+13	Cost per Trip=(Col 14/4)	Lead in km	Fuel Componant	Cost Per trip 10 MT
L	S	F	$N=8/((F*(L/S))+1)$	$(2*NL)+6$													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
10.00	20.00	2.00	4.00	86.00	21.50	1663.46	0.484	145.13	3360.00	2200.00	7368.59	736.86	8105.45	2026.36	10.00	497.36	2026.36
11.00	21.00	2.00	3.91	92.02	23.01	1780.28	0.518	155.32	3360.00	2200.00	7495.60	749.56	8245.16	2108.74	11.00	544.54	2108.74
12.00	22.00	2.00	3.83	97.92	24.48	1894.02	0.551	165.24	3360.00	2200.00	7619.26	761.93	8381.19	2188.30	12.00	591.43	2188.30
13.00	23.00	2.00	3.76	103.76	25.94	2006.98	0.584	175.10	3360.00	2200.00	7742.08	774.21	8516.29	2264.97	13.00	638.37	2264.97
14.00	24.00	2.00	3.69	109.32	27.33	2114.52	0.615	184.48	3360.00	2200.00	7859.00	785.90	8644.90	2342.79	14.00	685.34	2342.79
15.00	25.00	2.00	3.64	115.20	28.80	2228.26	0.648	194.40	3360.00	2200.00	7982.66	798.27	8780.93	2412.34	15.00	732.12	2412.34
20.00	25.00	2.00	3.08	129.20	32.30	2499.05	0.727	218.03	3360.00	2200.00	8277.08	827.71	9104.79	2956.1	20.00	970.39	2956.10
25.00	25.00	2.00	2.67	139.50	34.88	2698.67	0.785	235.44	3360.00	2200.00	8494.11	849.41	9343.52	3499.45	25.00	1208.81	3499.45
30.00	30.00	2.00	2.67	166.20	41.55	3214.72	0.935	280.46	3360.00	2200.00	9055.18	905.52	9960.70	3730.6	30.00	1439.96	3730.60
35.00	30.00	2.00	2.40	174.00	43.50	3365.60	0.979	293.63	3360.00	2200.00	9219.23	921.92	10141.15	4225.48	35.00	1677.14	4225.48
40.00	30.00	2.00	2.18	180.40	45.10	3489.39	1.015	304.43	3360.00	2200.00	9353.82	935.38	10289.20	4719.82	40.00	1914.31	4719.82
45.00	30.00	2.00	2.00	186.00	46.50	3597.71	1.046	313.88	3360.00	2200.00	9471.59	947.16	10418.75	5209.38	45.00	2151.37	5209.38
50.00	30.00	1.75	2.04	210.00	52.50	4061.93	1.181	354.38	3360.00	2200.00	9976.31	997.63	10973.94	5379.38	50.00	2381.34	5379.38
60.00	35.00	1.75	2.00	246.00	61.50	4758.26	1.384	415.13	3360.00	2200.00	10733.39	1073.34	11806.73	5903.37	60.00	2845.36	5903.37
70.00	35.00	1.75	1.78	255.20	63.80	4936.21	1.436	430.65	3360.00	2200.00	10926.86	1092.69	12019.55	6752.56	70.00	3316.60	6752.56
80.00	35.00	1.75	1.60	262.00	65.50	5067.74	1.474	442.13	3360.00	2200.00	11069.87	1106.99	12176.86	7610.54	80.00	3788.03	7610.54
90.00	35.00	1.75	1.45	267.00	66.75	5164.45	1.502	450.56	3360.00	2200.00	11175.01	1117.50	12292.51	8477.59	90.00	4259.66	8477.59
100.00	35.00	1.75	1.33	272.00	68.00	5261.16	1.530	459.00	3360.00	2200.00	11280.16	1128.02	12408.18	9329.46	100.00	4730.96	9329.46
125.00	40.00	1.50	1.41	358.50	89.63	6934.67	2.017	605.00	3360.00	2200.00	13099.67	1309.97	14409.64	10219.6	125.00	5882.01	10219.60
150.00	40.00	1.50	1.21	369.00	92.25	7137.38	2.076	622.69	3360.00	2200.00	13320.07	1332.01	14652.08	12109.16	150.00	7054.61	12109.16
175.00	40.00	1.25	1.24	440.00	110.00	8510.70	2.475	742.50	3360.00	2200.00	14813.20	1481.32	16294.52	13140.74	175.00	8208.48	13140.74
200.00	40.00	1.25	1.1	446.00	111.50	8626.76	2.509	752.63	3360.00	2200.00	14939.39	1493.94	16433.33	14939.39	200.00	9379.39	14939.39
250.00	40.00	1.25	0.91	461.00	115.25	8916.89	2.593	777.94	3360.00	2200.00	15254.83	1525.48	16780.31	18439.9	250.00	11719.03	18439.90
300.00	40.00	1.25	0.77	468.00	117.00	9052.29	2.633	789.75	3360.00	2200.00	15402.04	1540.20	16942.24	22002.91	300.00	14060.06	22002.91

Lead in Km	Av.Speed Km/Hrs	Factor	No. of Trips	Km done	Qty of Diesel= 4Km/Ltr	Cost of Diesel	Qty of mobile oil in Ltr	Cost of mobile oil@300/Ltr	Cost of 6 Mazdoor @560/lbr	Hire Charges of Truck@Rs. 2200 per day	Total cost	add 10% Overhead Charges	Gross Total of 12+13	Cost per Trip=(Col 14/4)	Lead in km	Fuel Component	Cost Per trip 10 MT
L	S	F	$N=8/((F*(L/S))+1)$	$(2*NL)+6$													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
350.00	40.00	1.25	0.67	475.00	118.75	9187.69	2.672	801.56	3360.00	2200.00	15549.25	1554.93	17104.18	25528.63	350.00	16400.26	25528.63
400.00	40.00	1.25	0.59	478.00	119.50	9245.72	2.689	806.63	3360.00	2200.00	15612.35	1561.24	17173.59	29107.78	400.00	18741.66	29107.78
500.00	40.00	1.25	0.48	486.00	121.50	9400.46	2.734	820.13	3360.00	2200.00	15780.59	1578.06	17358.65	36163.85	500.00	23422.17	36163.85
600.00	40.00	1.25	0.41	498.00	124.50	9632.57	2.801	840.38	3360.00	2200.00	16032.95	1603.30	17636.25	43015.24	600.00	28098.15	43015.24
700.00	40.00	1.25	0.35	496.00	124.00	9593.88	2.790	837.00	3360.00	2200.00	15990.88	1599.09	17589.97	50257.06	700.00	32782.77	50257.06
800.00	40.00	1.25	0.31	498.31	124.58	9638.75	2.803	840.92	3360.00	2200.00	16039.67	1603.97	17643.64	57341.83	800.00	37464.84	57341.83
900.00	40.00	1.25	0.27	500.42	125.11	9679.76	2.815	844.49	3360.00	2200.00	16084.25	1608.43	17692.68	64412.41	900.00	42146.34	64412.41
1000.00	40.00	1.25	0.25	502.12	125.53	9712.26	2.824	847.33	3360.00	2200.00	16119.59	1611.96	17731.55	71480.31	1000.00	46825.16	71480.31

Asst. Chief Engineer (Mech.)
P. W. Region,Pune

STATEMENT - C 1 (With Manual Loading) For 2020-2021 Maharashtra

Cost of Diesel (30-06-2020)

77.37 Per Litre

Cost of Oil (As on 30-06-2020)

300 Per Litre

Labour Charges of mazdoor

560 Per Labour

Lead in km	Cost Per Trip	Fuel Component	ConcreteBlock (FORM)		Cement, Lime, Stone Block, GI, CI, CC & AC Pipes / Sheet & Plate, Glass in packs, Distemper, AC Sheet, Fitting Iron Sheet		Bricks		Tiles Half Round Tiles /Roofing Tiles/Manlore Tiles		Steel (MS, TMT, H.Y.S.D.) Structural Steel		Flooring Tiles Ceramic/ Marbonate		Asphalt In Drum (approx Gross wt 172 kg per drum)	
L	Rs.		Unit Cum		Unit MT.		Unit Per 1000 Nos.		Unit Cum		Unit MT.		Unit Sqm		Unit Drums.	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			7.00		10.00		3.105		5		10.00		100		50	
0.50	857.17	41.70	122.45	5.96	85.72	4.17	276.06	13.43	171.43	8.34	85.72	4.17	8.57	0.42	17.14	0.83
1.00	926.05	65.85	132.29	9.41	92.61	6.59	298.24	21.21	185.21	13.17	92.61	6.59	9.26	0.66	18.52	1.32
1.50	993.33	89.94	141.90	12.85	99.33	8.99	319.91	28.97	198.67	17.99	99.33	8.99	9.93	0.90	19.87	1.80
2.00	1057.78	113.95	151.11	16.28	105.78	11.40	340.67	36.70	211.56	22.79	105.78	11.40	10.58	1.14	21.16	2.28
2.50	1124.50	138.05	160.64	19.72	112.45	13.81	362.16	44.46	224.90	27.61	112.45	13.81	11.25	1.38	22.49	2.76
3.00	1188.26	162.09	169.75	23.16	118.83	16.21	382.69	52.20	237.65	32.42	118.83	16.21	11.88	1.62	23.77	3.24
3.50	1251.70	186.19	178.81	26.60	125.17	18.62	403.12	59.96	250.34	37.24	125.17	18.62	12.52	1.86	25.03	3.72
4.00	1314.09	210.12	187.73	30.02	131.41	21.01	423.22	67.67	262.82	42.02	131.41	21.01	13.14	2.10	26.28	4.20
4.50	1375.14	234.09	196.45	33.44	137.51	23.41	442.88	75.39	275.03	46.82	137.51	23.41	13.75	2.34	27.50	4.68
5.00	1436.58	258.16	205.23	36.88	143.66	25.82	462.67	83.14	287.32	51.63	143.66	25.82	14.37	2.58	28.73	5.16
5.50	1500.53	282.20	214.36	40.31	150.05	28.22	483.26	90.89	300.11	56.44	150.05	28.22	15.01	2.82	30.01	5.64
6.00	1559.32	306.04	222.76	43.72	155.93	30.60	502.20	98.56	311.86	61.21	155.93	30.60	15.59	3.06	31.19	6.12
6.50	1623.05	330.02	231.86	47.15	162.31	33.00	522.72	106.29	324.61	66.00	162.31	33.00	16.23	3.30	32.46	6.60
7.00	1680.75	354.07	240.11	50.58	168.08	35.41	541.30	114.03	336.15	70.81	168.08	35.41	16.81	3.54	33.62	7.08
7.50	1740.10	377.96	248.59	53.99	174.01	37.80	560.42	121.73	348.02	75.59	174.01	37.80	17.40	3.78	34.80	7.56

Lead in km	Cost Per Trip	Fuel Component	ConcreteBlock (FORM)		Cement, Lime, Stone Block, GI, CI, CC & AC Pipes / Sheet& Plate, Glass in packs, Distemper, AC Sheet, Fitting Iron Sheet		Bricks		Tiles Half Round Tiles /Roofing Tiles/Manlore Tiles		Steel (MS, TMT, H.Y.S.D.) Structural Steel		Flooring Tiles Ceramic/ Marbonate		Asphalt In Drum (approx Gross wt 172 kg per drum)	
L	Rs.		Unit Cum		Unit MT.		Unit Per 1000 Nos.		Unit Cum		Unit MT.		Unit Sqm		Unit Drums.	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			7.00		10.00		3.105		5		10.00		100		50	
8.00	1801.43	401.89	257.35	57.41	180.14	40.19	580.17	129.43	360.29	80.38	180.14	40.19	18.01	4.02	36.03	8.04
8.50	1858.14	425.82	265.45	60.83	185.81	42.58	598.43	137.14	371.63	85.16	185.81	42.58	18.58	4.26	37.16	8.52
9.00	1916.46	449.79	273.78	64.26	191.65	44.98	617.22	144.86	383.29	89.96	191.65	44.98	19.16	4.50	38.33	9.00
9.50	1972.57	473.55	281.80	67.65	197.26	47.36	635.29	152.51	394.51	94.71	197.26	47.36	19.73	4.74	39.45	9.47
10.00	2026.36	497.36	289.48	71.05	202.64	49.74	652.61	160.18	405.27	99.47	202.64	49.74	20.26	4.97	40.53	9.95
11.00	2108.74	544.54	301.25	77.79	210.87	54.45	679.14	175.38	421.75	108.91	210.87	54.45	21.09	5.45	42.17	10.89
12.00	2188.30	591.43	312.61	84.49	218.83	59.14	704.77	190.48	437.66	118.29	218.83	59.14	21.88	5.91	43.77	11.83
13.00	2264.97	638.37	323.57	91.20	226.50	63.84	729.46	205.59	452.99	127.67	226.50	63.84	22.65	6.38	45.30	12.77
14.00	2342.79	685.34	334.68	97.91	234.28	68.53	754.52	220.72	468.56	137.07	234.28	68.53	23.43	6.85	46.86	13.71
15.00	2412.34	732.12	344.62	104.59	241.23	73.21	776.92	235.79	482.47	146.42	241.23	73.21	24.12	7.32	48.25	14.64
20.00	2956.10	970.39	422.30	138.63	295.61	97.04	952.05	312.52	591.22	194.08	295.61	97.04	29.56	9.70	59.12	19.41
25.00	3499.45	1208.81	499.92	172.69	349.95	120.88	1127.04	389.31	699.89	241.76	349.95	120.88	34.99	12.09	69.99	24.18
30.00	3730.60	1439.96	532.94	205.71	373.06	144.00	1201.48	463.76	746.12	287.99	373.06	144.00	37.31	14.40	74.61	28.80
35.00	4225.48	1677.14	603.64	239.59	422.55	167.71	1360.86	540.14	845.10	335.43	422.55	167.71	42.25	16.77	84.51	33.54
40.00	4719.82	1914.31	674.26	273.47	471.98	191.43	1520.07	616.52	943.96	382.86	471.98	191.43	47.20	19.14	94.40	38.29
45.00	5209.38	2151.37	744.20	307.34	520.94	215.14	1677.74	692.87	1041.88	430.27	520.94	215.14	52.09	21.51	104.19	43.03
50.00	5379.38	2381.34	768.48	340.19	537.94	238.13	1732.49	766.94	1075.88	476.27	537.94	238.13	53.79	23.81	107.59	47.63
60.00	5903.37	2845.36	843.34	406.48	590.34	284.54	1901.25	916.38	1180.67	569.07	590.34	284.54	59.03	28.45	118.07	56.91
70.00	6752.56	3316.60	964.65	473.80	675.26	331.66	2174.74	1068.15	1350.51	663.32	675.26	331.66	67.53	33.17	135.05	66.33

Lead in km	Cost Per Trip	Fuel Component	ConcreteBlock (FORM)		Cement, Lime, Stone Block, GI, CI, CC & AC Pipes / Sheet& Plate, Glass in packs, Distemper, AC Sheet, Fitting Iron Sheet		Bricks		Tiles Half Round Tiles /Roofing Tiles/Manlore Tiles		Steel (MS, TMT, H.Y.S.D.) Structural Steel		Flooring Tiles Ceramic/ Marbonate		Asphalt In Drum (approx Gross wt 172 kg per drum)	
L	Rs.		Unit Cum		Unit MT.		Unit Per 1000 Nos.		Unit Cum		Unit MT.		Unit Sqm		Unit Drums.	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			7.00		10.00		3.105		5		10.00		100		50	
80.00	7610.54	3788.03	1087.22	541.15	761.05	378.80	2451.06	1219.98	1522.11	757.61	761.05	378.80	76.11	37.88	152.21	75.76
90.00	8477.59	4259.66	1211.08	608.52	847.76	425.97	2730.30	1371.87	1695.52	851.93	847.76	425.97	84.78	42.60	169.55	85.19
100.00	9329.46	4730.96	1332.78	675.85	932.95	473.10	3004.66	1523.66	1865.89	946.19	932.95	473.10	93.29	47.31	186.59	94.62
125.00	10219.60	5882.01	1459.94	840.29	1021.96	588.20	3291.34	1894.37	2043.92	1176.40	1021.96	588.20	102.20	58.82	204.39	117.64
150.00	12109.16	7054.61	1729.88	1007.80	1210.92	705.46	3899.89	2272.02	2421.83	1410.92	1210.92	705.46	121.09	70.55	242.18	141.09
175.00	13140.74	8208.48	1877.25	1172.64	1314.07	820.85	4232.12	2643.63	2628.15	1641.70	1314.07	820.85	131.41	82.08	262.81	164.17
200.00	14939.39	9379.39	2134.20	1339.91	1493.94	937.94	4811.40	3020.74	2987.88	1875.88	1493.94	937.94	149.39	93.79	298.79	187.59
250.00	18439.90	11719.03	2634.27	1674.15	1843.99	1171.90	5938.78	3774.24	3687.98	2343.81	1843.99	1171.90	184.40	117.19	368.80	234.38
300.00	22002.91	14060.06	3143.27	2008.58	2200.29	1406.01	7086.28	4528.20	4400.58	2812.01	2200.29	1406.01	220.03	140.60	440.06	281.20
350.00	25528.63	16400.26	3646.95	2342.89	2552.86	1640.03	8221.78	5281.89	5105.73	3280.05	2552.86	1640.03	255.29	164.00	510.57	328.01
400.00	29107.78	18741.66	4158.25	2677.38	2910.78	1874.17	9374.49	6035.96	5821.56	3748.33	2910.78	1874.17	291.08	187.42	582.16	374.83
500.00	36163.85	23422.17	5166.26	3346.02	3616.39	2342.22	11646.97	7543.37	7232.77	4684.43	3616.39	2342.22	361.64	234.22	723.28	468.44
600.00	43015.24	28098.15	6145.03	4014.02	4301.52	2809.82	13853.54	9049.32	8603.05	5619.63	4301.52	2809.82	430.15	280.98	860.30	561.96
700.00	50257.06	32782.77	7179.58	4683.25	5025.71	3278.28	16185.85	10558.06	10051.41	6556.55	5025.71	3278.28	502.57	327.83	1005.14	655.66
800.00	57341.83	37464.84	8191.69	5352.12	5734.18	3746.48	18467.58	12065.97	11468.37	7492.97	5734.18	3746.48	573.42	374.65	1146.84	749.30
900.00	64412.41	42146.34	9201.77	6020.91	6441.24	4214.63	20744.74	13573.70	12882.48	8429.27	6441.24	4214.63	644.12	421.46	1288.25	842.93
1000.00	71480.31	46825.16	10211.47	6689.31	7148.03	4682.52	23021.03	15080.57	14296.06	9365.03	7148.03	4682.52	714.80	468.25	1429.61	936.50

Asst. Chief Engineer (Mech.)
P. W. Region,Pune

STATEMENT - C 1 (Pipes)

(FOR SSR 2020-2021)

Cost of Diesel (As on 30-06-2020)
 Cost of mobile Oil (As on 30-06-2020)
 Hire charges of Loader
 Hire charges of Truck

77.37 Per Litre
 300 Per Litre
 569 Per trip
 2200 Per Day

Lead in km	Total Cost Per Trip Lead Charges (Including Iodar)	Fuel Componant	Lead Charges for NP-2 Class Pipes																					
			100 mm		150 mm		225 mm		300 mm		450 mm		600 mm		800 mm		900mm		1000 mm		1200 mm		1800 mm	
			Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm	
			L.F.	Fuel Comp.		Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
			208.00		156		114.00		87.50		62.50		37.50		27.50		22.50		12.50		10.00		5.00	
0.50	933.37	41.70	4.49	0.20	5.98	0.27	8.19	0.37	10.67	0.48	14.93	0.67	24.89	1.11	33.94	1.52	41.48	1.85	74.67	3.34	93.34	4.17	186.67	8.34
1.00	975.16	65.85	4.69	0.32	6.25	0.42	8.55	0.58	11.14	0.75	15.60	1.05	26.00	1.76	35.46	2.39	43.34	2.93	78.01	5.27	97.52	6.59	195.03	13.17
1.50	1016.45	89.94	4.89	0.43	6.52	0.58	8.92	0.79	11.62	1.03	16.26	1.44	27.11	2.40	36.96	3.27	45.18	4.00	81.32	7.20	101.65	8.99	203.29	17.99
2.00	1056.70	113.95	5.08	0.55	6.77	0.73	9.27	1.00	12.08	1.30	16.91	1.82	28.18	3.04	38.43	4.14	46.96	5.06	84.54	9.12	105.67	11.40	211.34	22.79
2.50	1097.18	138.05	5.27	0.66	7.03	0.88	9.62	1.21	12.54	1.58	17.55	2.21	29.26	3.68	39.90	5.02	48.76	6.14	87.77	11.04	109.72	13.81	219.44	27.61
3.00	1137.37	162.09	5.47	0.78	7.29	1.04	9.98	1.42	13.00	1.85	18.20	2.59	30.33	4.32	41.36	5.89	50.55	7.20	90.99	12.97	113.74	16.21	227.47	32.42
3.50	1176.91	186.19	5.66	0.90	7.54	1.19	10.32	1.63	13.45	2.13	18.83	2.98	31.38	4.97	42.80	6.77	52.31	8.28	94.15	14.90	117.69	18.62	235.38	37.24
4.00	1216.12	210.12	5.85	1.01	7.80	1.35	10.67	1.84	13.90	2.40	19.46	3.36	32.43	5.60	44.22	7.64	54.05	9.34	97.29	16.81	121.61	21.01	243.22	42.02
4.50	1254.87	234.09	6.03	1.13	8.04	1.50	11.01	2.05	14.34	2.68	20.08	3.75	33.46	6.24	45.63	8.51	55.77	10.40	100.39	18.73	125.49	23.41	250.97	46.82
5.00	1293.03	258.16	6.22	1.24	8.29	1.65	11.34	2.26	14.78	2.95	20.69	4.13	34.48	6.88	47.02	9.39	57.47	11.47	103.44	20.65	129.30	25.82	258.61	51.63
5.50	1333.56	282.20	6.41	1.36	8.55	1.81	11.70	2.48	15.24	3.23	21.34	4.52	35.56	7.53	48.49	10.26	59.27	12.54	106.68	22.58	133.36	28.22	266.71	56.44
6.00	1371.07	306.04	6.59	1.47	8.79	1.96	12.03	2.68	15.67	3.50	21.94	4.90	36.56	8.16	49.86	11.13	60.94	13.60	109.69	24.48	137.11	30.60	274.21	61.21
6.50	1410.21	330.02	6.78	1.59	9.04	2.12	12.37	2.89	16.12	3.77	22.56	5.28	37.61	8.80	51.28	12.00	62.68	14.67	112.82	26.40	141.02	33.00	282.04	66.00
7.00	1448.37	354.07	6.96	1.70	9.28	2.27	12.71	3.11	16.55	4.05	23.17	5.67	38.62	9.44	52.67	12.88	64.37	15.74	115.87	28.33	144.84	35.41	289.67	70.81
7.50	1486.32	377.96	7.15	1.82	9.53	2.42	13.04	3.32	16.99	4.32	23.78	6.05	39.64	10.08	54.05	13.74	66.06	16.80	118.91	30.24	148.63	37.80	297.26	75.59
8.00	1524.23	401.89	7.33	1.93	9.77	2.58	13.37	3.53	17.42	4.59	24.39	6.43	40.65	10.72	55.43	14.61	67.74	17.86	121.94	32.15	152.42	40.19	304.85	80.38
8.50	1561.61	425.82	7.51	2.05	10.01	2.73	13.70	3.74	17.85	4.87	24.99	6.81	41.64	11.36	56.79	15.48	69.40	18.93	124.93	34.07	156.16	42.58	312.32	85.16
9.00	1599.07	449.79	7.69	2.16	10.25	2.88	14.03	3.95	18.28	5.14	25.59	7.20	42.64	11.99	58.15	16.36	71.07	19.99	127.93	35.98	159.91	44.98	319.81	89.96
9.50	1635.27	473.55	7.86	2.28	10.48	3.04	14.34	4.15	18.69	5.41	26.16	7.58	43.61	12.63	59.46	17.22	72.68	21.05	130.82	37.88	163.53	47.36	327.05	94.71

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Lead Charges for NP-2 Class Pipes																					
			100 mm		150 mm		225 mm		300 mm		450 mm		600 mm		800 mm		900mm		1000 mm		1200 mm		1800 mm	
			Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm	
			L.F.	Fuel		Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel	L.F.	Fuel
			208.00	Comp.	156	Comp.	114.00	Comp.	87.50	Comp.	62.50	Comp.	37.50	Comp.	27.50	Comp.	22.50	Comp.	12.50	Comp.	10.00	Comp.	5.00	Comp.
10.00	1671.36	497.36	8.04	2.39	10.71	3.19	14.66	4.36	19.10	5.68	26.74	7.96	44.57	13.26	60.78	18.09	74.28	22.10	133.71	39.79	167.14	49.74	334.27	99.47
11.00	1732.89	544.54	8.33	2.62	11.11	3.49	15.20	4.78	19.80	6.22	27.73	8.71	46.21	14.52	63.01	19.80	77.02	24.20	138.63	43.56	173.29	54.45	346.58	108.91
12.00	1793.05	591.43	8.62	2.84	11.49	3.79	15.73	5.19	20.49	6.76	28.69	9.46	47.81	15.77	65.20	21.51	79.69	26.29	143.44	47.31	179.31	59.14	358.61	118.29
13.00	1851.92	638.37	8.90	3.07	11.87	4.09	16.24	5.60	21.16	7.30	29.63	10.21	49.38	17.02	67.34	23.21	82.31	28.37	148.15	51.07	185.19	63.84	370.38	127.67
14.00	1909.83	685.34	9.18	3.29	12.24	4.39	16.75	6.01	21.83	7.83	30.56	10.97	50.93	18.28	69.45	24.92	84.88	30.46	152.79	54.83	190.98	68.53	381.97	137.07
15.00	1966.59	732.12	9.45	3.52	12.61	4.69	17.25	6.42	22.48	8.37	31.47	11.71	52.44	19.52	71.51	26.62	87.40	32.54	157.33	58.57	196.66	73.21	393.32	146.42
20.00	2325.95	970.39	11.18	4.67	14.91	6.22	20.40	8.51	26.58	11.09	37.22	15.53	62.03	25.88	84.58	35.29	103.38	43.13	186.08	77.63	232.60	97.04	465.19	194.08
25.00	2685.08	1208.81	12.91	5.81	17.21	7.75	23.55	10.60	30.69	13.81	42.96	19.34	71.60	32.23	97.64	43.96	119.34	53.72	214.81	96.70	268.51	120.88	537.02	241.76
30.00	2916.53	1439.96	14.02	6.92	18.70	9.23	25.58	12.63	33.33	16.46	46.66	23.04	77.77	38.40	106.06	52.36	129.62	64.00	233.32	115.20	291.65	144.00	583.31	287.99
35.00	3254.48	1677.14	15.65	8.06	20.86	10.75	28.55	14.71	37.19	19.17	52.07	26.83	86.79	44.72	118.34	60.99	144.64	74.54	260.36	134.17	325.45	167.71	650.90	335.43
40.00	3592.58	1914.31	17.27	9.20	23.03	12.27	31.51	16.79	41.06	21.88	57.48	30.63	95.80	51.05	130.64	69.61	159.67	85.08	287.41	153.14	359.26	191.43	718.52	382.86
45.00	3930.38	2151.37	18.90	10.34	25.19	13.79	34.48	18.87	44.92	24.59	62.89	34.42	104.81	57.37	142.92	78.23	174.68	95.62	314.43	172.11	393.04	215.14	786.08	430.27
50.00	4134.88	2381.34	19.88	11.45	26.51	15.27	36.27	20.89	47.26	27.22	66.16	38.10	110.26	63.50	150.36	86.59	183.77	105.84	330.79	190.51	413.49	238.13	826.98	476.27
60.00	4624.37	2845.36	22.23	13.68	29.64	18.24	40.56	24.96	52.85	32.52	73.99	45.53	123.32	75.88	168.16	103.47	205.53	126.46	369.95	227.63	462.44	284.54	924.87	569.07
70.00	5246.83	3316.60	25.23	15.95	33.63	21.26	46.02	29.09	59.96	37.90	83.95	53.07	139.92	88.44	190.79	120.60	233.19	147.40	419.75	265.33	524.68	331.66	1049.37	663.32
80.00	5869.54	3788.03	28.22	18.21	37.63	24.28	51.49	33.23	67.08	43.29	93.91	60.61	156.52	101.01	213.44	137.75	260.87	168.36	469.56	303.04	586.95	378.80	1173.91	757.61
90.00	6491.82	4259.66	31.21	20.48	41.61	27.31	56.95	37.37	74.19	48.68	103.87	68.15	173.12	113.59	236.07	154.90	288.53	189.32	519.35	340.77	649.18	425.97	1298.36	851.93
100.00	7114.93	4730.96	34.21	22.75	45.61	30.33	62.41	41.50	81.31	54.07	113.84	75.70	189.73	126.16	258.72	172.03	316.22	210.26	569.19	378.48	711.49	473.10	1422.99	946.19
125.00	8171.26	5882.01	39.28	28.28	52.38	37.71	71.68	51.60	93.39	67.22	130.74	94.11	217.90	156.85	297.14	213.89	363.17	261.42	653.70	470.56	817.13	588.20	1634.25	1176.40
150.00	9628.21	7054.61	46.29	33.92	61.72	45.22	84.46	61.88	110.04	80.62	154.05	112.87	256.75	188.12	350.12	256.53	427.92	313.54	770.26	564.37	962.82	705.46	1925.64	1410.92
175.00	10734.38	8208.48	51.61	39.46	68.81	52.62	94.16	72.00	122.68	93.81	171.75	131.34	286.25	218.89	390.34	298.49	477.08	364.82	858.75	656.68	1073.44	820.85	2146.88	1641.70
200.00	12140.71	9379.39	58.37	45.09	77.83	60.12	106.50	82.28	138.75	107.19	194.25	150.07	323.75	250.12	441.48	341.07	539.59	416.86	971.26	750.35	1214.07	937.94	2428.14	1875.88

Asst. Chief Engineer (Mech.)
P. W. Region,Pune

STATEMENT - C 1 (Pipes)
(FOR SSR 2020-2021)

Cost of Diesel (As on 30-06-2020)	77.37 Per Litre
Cost of mobile Oil (As on 30-06-2020)	300 Per Litre
Hire charges of Loader	569 Per trip
Hire charges of Truck	2200 Per Day

Lead in km	Total Cost Per Trip Lead Charges (Including Iodar)	Fuel Component	Lead Charges for NP-3 Class Pipes															
			300 mm		450 mm		600 mm		800 mm		900mm		1000 mm		1200 mm		1800 mm	
			Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm	
			L.F.		L.F.		L.F.		L.F.		L.F.		L.F.		L.F.		L.F.	
			75.00	Fuel Comp.	32.50	Fuel Comp.	22.50	Fuel Comp.	15.00	Fuel Comp.	12.50	Fuel Comp.	10.00	Fuel Comp.	7.50	Fuel Comp.	5.00	Fuel Comp.
0.50	933.37	41.70	12.44	0.56	28.72	1.28	41.48	1.85	62.22	2.78	74.67	3.34	93.34	4.17	124.45	5.56	186.67	8.34
1.00	975.16	65.85	13.00	0.88	30.00	2.03	43.34	2.93	65.01	4.39	78.01	5.27	97.52	6.59	130.02	8.78	195.03	13.17
1.50	1016.45	89.94	13.55	1.20	31.28	2.77	45.18	4.00	67.76	6.00	81.32	7.20	101.65	8.99	135.53	11.99	203.29	17.99
2.00	1056.70	113.95	14.09	1.52	32.51	3.51	46.96	5.06	70.45	7.60	84.54	9.12	105.67	11.40	140.89	15.19	211.34	22.79
2.50	1097.18	138.05	14.63	1.84	33.76	4.25	48.76	6.14	73.15	9.20	87.77	11.04	109.72	13.81	146.29	18.41	219.44	27.61
3.00	1137.37	162.09	15.16	2.16	35.00	4.99	50.55	7.20	75.82	10.81	90.99	12.97	113.74	16.21	151.65	21.61	227.47	32.42
3.50	1176.91	186.19	15.69	2.48	36.21	5.73	52.31	8.28	78.46	12.41	94.15	14.90	117.69	18.62	156.92	24.83	235.38	37.24
4.00	1216.12	210.12	16.21	2.80	37.42	6.47	54.05	9.34	81.07	14.01	97.29	16.81	121.61	21.01	162.15	28.02	243.22	42.02
4.50	1254.87	234.09	16.73	3.12	38.61	7.20	55.77	10.40	83.66	15.61	100.39	18.73	125.49	23.41	167.32	31.21	250.97	46.82
5.00	1293.03	258.16	17.24	3.44	39.79	7.94	57.47	11.47	86.20	17.21	103.44	20.65	129.30	25.82	172.40	34.42	258.61	51.63
5.50	1333.56	282.20	17.78	3.76	41.03	8.68	59.27	12.54	88.90	18.81	106.68	22.58	133.36	28.22	177.81	37.63	266.71	56.44
6.00	1371.07	306.04	18.28	4.08	42.19	9.42	60.94	13.60	91.40	20.40	109.69	24.48	137.11	30.60	182.81	40.81	274.21	61.21
6.50	1410.21	330.02	18.80	4.40	43.39	10.15	62.68	14.67	94.01	22.00	112.82	26.40	141.02	33.00	188.03	44.00	282.04	66.00
7.00	1448.37	354.07	19.31	4.72	44.57	10.89	64.37	15.74	96.56	23.60	115.87	28.33	144.84	35.41	193.12	47.21	289.67	70.81
7.50	1486.32	377.96	19.82	5.04	45.73	11.63	66.06	16.80	99.09	25.20	118.91	30.24	148.63	37.80	198.18	50.39	297.26	75.59
8.00	1524.23	401.89	20.32	5.36	46.90	12.37	67.74	17.86	101.62	26.79	121.94	32.15	152.42	40.19	203.23	53.59	304.85	80.38
8.50	1561.61	425.82	20.82	5.68	48.05	13.10	69.40	18.93	104.11	28.39	124.93	34.07	156.16	42.58	208.21	56.78	312.32	85.16
9.00	1599.07	449.79	21.32	6.00	49.20	13.84	71.07	19.99	106.60	29.99	127.93	35.98	159.91	44.98	213.21	59.97	319.81	89.96

Lead in km	Total Cost Per Trip Lead Charges (Including Iodar)	Fuel Component	Lead Charges for NP-3 Class Pipes															
			300 mm		450 mm		600 mm		800 mm		900mm		1000 mm		1200 mm		1800 mm	
			Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm	
			L.F.		L.F.		L.F.		L.F.		L.F.		L.F.		L.F.		L.F.	
			75.00	Fuel Comp.	32.50	Fuel Comp.	22.50	Fuel Comp.	15.00	Fuel Comp.	12.50	Fuel Comp.	10.00	Fuel Comp.	7.50	Fuel Comp.	5.00	Fuel Comp.
9.50	1635.27	473.55	21.80	6.31	50.32	14.57	72.68	21.05	109.02	31.57	130.82	37.88	163.53	47.36	218.04	63.14	327.05	94.71
10.00	1671.36	497.36	22.28	6.63	51.43	15.30	74.28	22.10	111.42	33.16	133.71	39.79	167.14	49.74	222.85	66.31	334.27	99.47
11.00	1732.89	544.54	23.11	7.26	53.32	16.76	77.02	24.20	115.53	36.30	138.63	43.56	173.29	54.45	231.05	72.61	346.58	108.91
12.00	1793.05	591.43	23.91	7.89	55.17	18.20	79.69	26.29	119.54	39.43	143.44	47.31	179.31	59.14	239.07	78.86	358.61	118.29
13.00	1851.92	638.37	24.69	8.51	56.98	19.64	82.31	28.37	123.46	42.56	148.15	51.07	185.19	63.84	246.92	85.12	370.38	127.67
14.00	1909.83	685.34	25.46	9.14	58.76	21.09	84.88	30.46	127.32	45.69	152.79	54.83	190.98	68.53	254.64	91.38	381.97	137.07
15.00	1966.59	732.12	26.22	9.76	60.51	22.53	87.40	32.54	131.11	48.81	157.33	58.57	196.66	73.21	262.21	97.62	393.32	146.42
20.00	2325.95	970.39	31.01	12.94	71.57	29.86	103.38	43.13	155.06	64.69	186.08	77.63	232.60	97.04	310.13	129.39	465.19	194.08
25.00	2685.08	1208.81	35.80	16.12	82.62	37.19	119.34	53.72	179.01	80.59	214.81	96.70	268.51	120.88	358.01	161.17	537.02	241.76
30.00	2916.53	1439.96	38.89	19.20	89.74	44.31	129.62	64.00	194.44	96.00	233.32	115.20	291.65	144.00	388.87	191.99	583.31	287.99
35.00	3254.48	1677.14	43.39	22.36	100.14	51.60	144.64	74.54	216.97	111.81	260.36	134.17	325.45	167.71	433.93	223.62	650.90	335.43
40.00	3592.58	1914.31	47.90	25.52	110.54	58.90	159.67	85.08	239.51	127.62	287.41	153.14	359.26	191.43	479.01	255.24	718.52	382.86
45.00	3930.38	2151.37	52.41	28.68	120.93	66.20	174.68	95.62	262.03	143.42	314.43	172.11	393.04	215.14	524.05	286.85	786.08	430.27
50.00	4134.88	2381.34	55.13	31.75	127.23	73.27	183.77	105.84	275.66	158.76	330.79	190.51	413.49	238.13	551.32	317.51	826.98	476.27
60.00	4624.37	2845.36	61.66	37.94	142.29	87.55	205.53	126.46	308.29	189.69	369.95	227.63	462.44	284.54	616.58	379.38	924.87	569.07
70.00	5246.83	3316.60	69.96	44.22	161.44	102.05	233.19	147.40	349.79	221.11	419.75	265.33	524.68	331.66	699.58	442.21	1049.37	663.32
80.00	5869.54	3788.03	78.26	50.51	180.60	116.55	260.87	168.36	391.30	252.54	469.56	303.04	586.95	378.80	782.61	505.07	1173.91	757.61
90.00	6491.82	4259.66	86.56	56.80	199.75	131.07	288.53	189.32	432.79	283.98	519.35	340.77	649.18	425.97	865.58	567.95	1298.36	851.93
100.00	7114.93	4730.96	94.87	63.08	218.92	145.57	316.22	210.26	474.33	315.40	569.19	378.48	711.49	473.10	948.66	630.79	1422.99	946.19
125.00	8171.26	5882.01	108.95	78.43	251.42	180.98	363.17	261.42	544.75	392.13	653.70	470.56	817.13	588.20	1089.50	784.27	1634.25	1176.40
150.00	9628.21	7054.61	128.38	94.06	296.25	217.06	427.92	313.54	641.88	470.31	770.26	564.37	962.82	705.46	1283.76	940.61	1925.64	1410.92
175.00	10734.38	8208.48	143.13	109.45	330.29	252.57	477.08	364.82	715.63	547.23	858.75	656.68	1073.44	820.85	1431.25	1094.46	2146.88	1641.70
200.00	12140.71	9379.39	161.88	125.06	373.56	288.60	539.59	416.86	809.38	625.29	971.26	750.35	1214.07	937.94	1618.76	1250.59	2428.14	1875.88

STATEMENT - C 1 (Pipes)
(FOR SSR 2020-2021)

Cost of Diesel (As on 30-06-2020) 77.37 Per Litre
 Cost of mobile Oil (As on 30-06-2020) 300 Per Litre
 Hire charges of Loader 569 Per trip
 Hire charges of Truck 2200 Per Day

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Lead Charges for NP-4 Class Pipes															
			300 mm		450 mm		600 mm		800 mm		900mm		1000 mm		1200 mm		1800 mm	
			Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
							22.50		15.00		12.50		10.00		7.50		5.00	
0.50	933.37	41.70					41.48	1.85	62.22	2.78	74.67	3.34	93.34	4.17	124.45	4.17	186.67	8.34
1.00	975.16	65.85					43.34	2.93	65.01	4.39	78.01	5.27	97.52	6.59	130.02	6.59	195.03	13.17
1.50	1016.45	89.94					45.18	4.00	67.76	6.00	81.32	7.20	101.65	8.99	135.53	8.99	203.29	17.99
2.00	1056.70	113.95					46.96	5.06	70.45	7.60	84.54	9.12	105.67	11.40	140.89	11.40	211.34	22.79
2.50	1097.18	138.05					48.76	6.14	73.15	9.20	87.77	11.04	109.72	13.81	146.29	13.81	219.44	27.61
3.00	1137.37	162.09					50.55	7.20	75.82	10.81	90.99	12.97	113.74	16.21	151.65	16.21	227.47	32.42
3.50	1176.91	186.19					52.31	8.28	78.46	12.41	94.15	14.90	117.69	18.62	156.92	18.62	235.38	37.24
4.00	1216.12	210.12					54.05	9.34	81.07	14.01	97.29	16.81	121.61	21.01	162.15	21.01	243.22	42.02
4.50	1254.87	234.09					55.77	10.40	83.66	15.61	100.39	18.73	125.49	23.41	167.32	23.41	250.97	46.82
5.00	1293.03	258.16					57.47	11.47	86.20	17.21	103.44	20.65	129.30	25.82	172.40	25.82	258.61	51.63
5.50	1333.56	282.20					59.27	12.54	88.90	18.81	106.68	22.58	133.36	28.22	177.81	28.22	266.71	56.44
6.00	1371.07	306.04					60.94	13.60	91.40	20.40	109.69	24.48	137.11	30.60	182.81	30.60	274.21	61.21
6.50	1410.21	330.02					62.68	14.67	94.01	22.00	112.82	26.40	141.02	33.00	188.03	33.00	282.04	66.00
7.00	1448.37	354.07					64.37	15.74	96.56	23.60	115.87	28.33	144.84	35.41	193.12	35.41	289.67	70.81
7.50	1486.32	377.96					66.06	16.80	99.09	25.20	118.91	30.24	148.63	37.80	198.18	37.80	297.26	75.59
8.00	1524.23	401.89					67.74	17.86	101.62	26.79	121.94	32.15	152.42	40.19	203.23	40.19	304.85	80.38
8.50	1561.61	425.82					69.40	18.93	104.11	28.39	124.93	34.07	156.16	42.58	208.21	42.58	312.32	85.16
9.00	1599.07	449.79					71.07	19.99	106.60	29.99	127.93	35.98	159.91	44.98	213.21	44.98	319.81	89.96
9.50	1635.27	473.55					72.68	21.05	109.02	31.57	130.82	37.88	163.53	47.36	218.04	47.36	327.05	94.71

Lead in km	Total Cost Per Trip Lead Charges (Including lodar)	Fuel Component	Lead Charges for NP-4 Class Pipes															
			300 mm		450 mm		600 mm		800 mm		900mm		1000 mm		1200 mm		1800 mm	
			Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm		Rgm	
			L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.	L.F.	Fuel Comp.
							22.50		15.00		12.50		10.00		7.50		5.00	
10.00	1671.36	497.36					74.28	22.10	111.42	33.16	133.71	39.79	167.14	49.74	222.85	49.74	334.27	99.47
11.00	1732.89	544.54					77.02	24.20	115.53	36.30	138.63	43.56	173.29	54.45	231.05	54.45	346.58	108.91
12.00	1793.05	591.43					79.69	26.29	119.54	39.43	143.44	47.31	179.31	59.14	239.07	59.14	358.61	118.29
13.00	1851.92	638.37					82.31	28.37	123.46	42.56	148.15	51.07	185.19	63.84	246.92	63.84	370.38	127.67
14.00	1909.83	685.34					84.88	30.46	127.32	45.69	152.79	54.83	190.98	68.53	254.64	68.53	381.97	137.07
15.00	1966.59	732.12					87.40	32.54	131.11	48.81	157.33	58.57	196.66	73.21	262.21	73.21	393.32	146.42
20.00	2325.95	970.39					103.38	43.13	155.06	64.69	186.08	77.63	232.60	97.04	310.13	97.04	465.19	194.08
25.00	2685.08	1208.81					119.34	53.72	179.01	80.59	214.81	96.70	268.51	120.88	358.01	120.88	537.02	241.76
30.00	2916.53	1439.96					129.62	64.00	194.44	96.00	233.32	115.20	291.65	144.00	388.87	144.00	583.31	287.99
35.00	3254.48	1677.14					144.64	74.54	216.97	111.81	260.36	134.17	325.45	167.71	433.93	167.71	650.90	335.43
40.00	3592.58	1914.31					159.67	85.08	239.51	127.62	287.41	153.14	359.26	191.43	479.01	191.43	718.52	382.86
45.00	3930.38	2151.37					174.68	95.62	262.03	143.42	314.43	172.11	393.04	215.14	524.05	215.14	786.08	430.27
50.00	4134.88	2381.34					183.77	105.84	275.66	158.76	330.79	190.51	413.49	238.13	551.32	238.13	826.98	476.27
60.00	4624.37	2845.36					205.53	126.46	308.29	189.69	369.95	227.63	462.44	284.54	616.58	284.54	924.87	569.07
70.00	5246.83	3316.60					233.19	147.40	349.79	221.11	419.75	265.33	524.68	331.66	699.58	331.66	1049.37	663.32
80.00	5869.54	3788.03					260.87	168.36	391.30	252.54	469.56	303.04	586.95	378.80	782.61	378.80	1173.91	757.61
90.00	6491.82	4259.66					288.53	189.32	432.79	283.98	519.35	340.77	649.18	425.97	865.58	425.97	1298.36	851.93
100.00	7114.93	4730.96					316.22	210.26	474.33	315.40	569.19	378.48	711.49	473.10	948.66	473.10	1422.99	946.19
125.00	8171.26	5882.01					363.17	261.42	544.75	392.13	653.70	470.56	817.13	588.20	1089.50	588.20	1634.25	1176.40
150.00	9628.21	7054.61					427.92	313.54	641.88	470.31	770.26	564.37	962.82	705.46	1283.76	705.46	1925.64	1410.92
175.00	10734.38	8208.48					477.08	364.82	715.63	547.23	858.75	656.68	1073.44	820.85	1431.25	820.85	2146.88	1641.70
200.00	12140.71	9379.39					539.59	416.86	809.38	625.29	971.26	750.35	1214.07	937.94	1618.76	937.94	2428.14	1875.88

Asst. Chief Engineer (Mech.)
P. W. Region,Pune

THEORITICAL REQUIREMENT OF MATERIALS BUILDING

EXCAVATION

Sr. No.	Item	Unit	Rubble in M ³	Over size metal in M ³	Sand in M ³	Quarry in spaul in M ³
1	Providing trap rubble soiling 15 to 20cm thick	M ³	1.00	-	-	0.20
2	Providing soiling using 80mm over size trap metal	M ³		1.00	0.15	-

PILE FOUNDATION

Sr. No.	Item	Unit	Cement	Sand in M ³
1	M-20 RCC cast in situ bored piles	M ³	8.00 bags	0.425

PLAIN CEMENT CONCRETE AND REINFORCED CEMENT CONCRETE

Sr. No.	Item	Unit	Cement in bags	Screened sand in M ³	Course Aggregate		
					40mm in M ³	20mm in M ³	12/10mm in M ³
1	Plain cement concrete 1:5:10	M ³	2.60	0.47	0.7	0.24	-
2	Plain cement concrete 1:4:8	M ³	3.40	0.47	0.7	0.24	-
3	Plain cement concrete 1:3:6	M ³	4.40	0.47	0.7	0.24	-
4	Plain cement concrete 1:2:4	M ³	6.40	0.445	0.7	0.22	0.11
5	M-10 grade cement concrete	M ³	4.40	0.47	0.7	0.24	-
6	M-15 grade PCC	M ³	6.00	0.44	0.56	0.22	0.11
7	M-20 grade PCC	M ³	7.00	0.425	0.56	0.22	0.11
8	M-15 grade cement concrete	M ³	6.00	0.425	-	0.67	0.22
9	M-20 grade cement concrete	M ³	7.00	0.425	-	0.57	0.28
10	M-25 cement concrete	M ³	7.50	0.425	-	0.57	0.28
11	M-30 grade cement concrete	M ³	8.00	0.425	-	0.57	0.28
12	M-35 grade cement concrete	M ³	8.25	0.425	-	0.57	0.28
13	P & F RCC Jali 50mm thick	M ²	0.06	-	-	-	-
14	P & L 50mm thick cement mortar layer in 1:8 proportion	M ²	0.22	0.06	-	-	-
	M-40 grade	M ³	8.50				

BRICK MASONARY

Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Bricks in Nos	M.S. bars in Kg.
1	First class brick masonry in CM 1:6 in plinth of inner wall / external wall.	M ³	1.24	0.25	475	-
2	Second class brick work in CM 1:6 in foundation and plinth of inner wall / external wall.	M ³	1.58	0.32	475	-
3	Second class brick work in CM 1:4 with pointing in CM 1:3 to exposed faces.	M ³	1.42	0.254	475	-
4	First class brick work in CM 1:6 in Superstructure	M ³	1.24	0.25	475	-
5	Second class brick work in CM 1:6 in superstructure	M ³	1.58	0.32	475	-
6	Second class brick work in CM 1:8 in superstructure	M ³	1.12	0.32	475	-
7	Second class brick work in CM 1:6 as backing in composite masonry	M ³	1.58	0.32	475	-
8	Second class half brick masonry in CM 1:4 with 6mm diameter M.S. Bars	M ²	0.255	0.034	57	1.76
9	Second class brick masonry in CM 1:3 for edge masonry with 6mm dia meter M.S. Bars	M ²	0.21	0.021	38	1.32
10	First class brick masonry in CM 1:4 for pillars rectangular in shape	M ³	2.60	0.25	475	-
11	First class brick masonry in CM 1:4 for pillars curved in shape	M ³	2.60	0.25	616	-
12	Second class brick masonry in CM 1:4 for pillars rectangular in shape	M ³	2.60	0.25	475	-
13	Second class brick masonry in CM 1:4 for pillars curved in shape	M ³	2.60	0.25	616	-
14	Second class brick masonry coping in CM 1:6	M ³	1.24	0.25	475	-
15	Fire brick masonry in fire clay 1:5 proportion	M ³	-	-	480	Fire clay in Mortar in M ³ 0.10

Stone masonry

Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Trap Rubble in M ³	Corner/Quins in Nos	Remark
1	UCR masonry in CM 1:6 in foundations and plinth of inner walls/external walls	M ³	1.70	0.35	1.16	2	
2	UCR masonry in CM 1:3 in basement	M ³	2.05	0.35	1.16	2	
3	UCR masonry in CM 1:6 in Super structure	M ³	1.70	0.35	1.16	2	
4	Random rubble masonry in CM 1:6 in foundation	M ³	1.70	0.35	1.16	2	
5	Random rubble masonry in CM 1:6 in Superstructure	M ³	1.70	0.35	1.16	2	
6	Random rubble masonry 1st sort in CM 1:6 in external walls of plinth	M ³	1.70	0.35	1.16	2	
7	Random rubble masonry 1st sort in CM 1:6 in Supersturcture	M ³	0.70	0.35	1.16	2	
8	CR masonry 3rd sort in CM 1:6 in Plinth	M ²	1.70	0.35	1.16	2	
9	CR masonry 3rd sort in CM 1:6 in Supersturcture	M ²	1.70	0.35	1.16	2	

Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Trap Rubble in M ³	Corner/Quins in Nos	Trap Header in Nos	Khandki in Nos
10	CR masonry 2nd sort in CM 1:6 in plinth	M ³	1.70	0.35	0.35	2	7	50
11	CR masonry 2nd sort in CM 1:6 in Supersturcture	M ³	1.70	0.35	0.35	2	7	50
12	CR masonry 1st sort in CM 1:6 in plinth	M ³	1.50	0.30	0.35	2	7	50
13	CR masonry 1st sort in CM 1:6 in Supersturcture	M ³	1.50	0.30	0.35	2	7	50
14	CR masonry 2nd sort using all stones of full height in each coarse in CM 1:6 in Plinth	M ³	1.70	0.35	0.35	2	7	50
15	CR masonry 2nd sort using all stones of full height in each coarse in CM 1:6 in Superstructure	M ³	1.70	0.35	0.35	2	7	50

Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Laterite stone 45 x 30 x 20 cm in Nos
16	Laterite masonry in CM 1:6 in foundations	M ³	1.02	0.21	45
17	Laterite masonry in CM 1:6 in Supersturcture	M ³	1.02	0.21	45

WATER PROOFING TREATMENT

Sr. No.	Item	Unit	Cement in bags	Screened sand in M ³	Course Aggregate	
					20mm in M ³	12/10mm in M ³
1	50mm thick damp proof coarse in CC 1:2:4	M ²	0.32	0.022	0.033	0.04
2	20mm thick integral finishing in CM 1:3	M ²	0.18	0.020		-
3	W.P. to terrace 112mm thick	M ²	0.55	0.07	Brick Bat 0.080	-
4	W.P. of BB coba to water closet	M ³	4.00	0.23	1.00	-
5	20mm thick water proof plaster in 1:3 for dado	M ²	0.22	0.024	-	-
6	25mm thick water proof bedding in CM 1:3	M ²	0.27	0.028	-	-

PLASTERING & POINTING

Sr. No.	Item	Unit	Cement in bags	Screened sand in M ³	Fine aggregate in M ³	Remark
1	6mm plaster in CM 1:4	M ²	0.054	0.0076	-	
2	6mm plaster in CM 1:3	M ²	0.07	0.0076	-	
3	12mm plaster in single coat in CM 1:5	M ²	0.090	0.015	-	
4	12mm plaster in single coat in CM 1:4	M ²	0.11	0.015	-	
5	12mm plaster in single coat in CM 1:3	M ²	0.14	0.015	-	
6	20mm cement plaster in CM 1:3 in single coat	M ²	0.228	0.024	-	
7	20mm cement plaster in CM 1:5 in two coat	M ²	0.14	0.025	-	
8	20mm cement plaster in CM 1:4 in two coat	M ²	0.17	0.025	-	
9	25mm thick plaster in CM 1:4 in two coat	M ²	0.217	0.031	-	
10	Sand faced plaster in CM 1:4 in two coats	M ²	0.25	0.033	-	
11	Rough cast plaster in two coats in CM 1:4	M ²	0.25	0.021	0.012	
12	Rough cast plaster in two coats in CM 1:4 with colour pigment	M ²	0.250	0.021	0.012	
13	Exterior stone crete facing in CM 1:3	M ²	0.300	0.015	0.015	
14	Flush grooved pointing CM 1:3 to brick masonry	M ²	0.030	0.003	-	
15	Flush grooved pointing in CM 1:3 to stone masonry	M ²	0.025	0.003	-	
16	Tuck pointing in CM 1:3 to stone masonry	M ²	0.050	0.005	-	
17	Weathered pointing in CM 1:3 to stone masonry	M ²	0.040	0.004	-	
18	Vee pointing in CM 1:3 to stone masonry	M ²	0.030	0.003	-	
19	Flush pointing in CM 1:3 to stone masonry	M ²	0.025	0.003	-	

PAVING AND FLOORING

Sr. No.	Item	Unit	Cement in bags	Screened Sand in M ³
1	Rough shahabad flooring 25 to 30mm thick on bed of 1:6 CM with CP 1:3	M ²	0.135	0.022
2	Rough shahabad flooring 40 to 50mm thick on bed of 1:6 CM with CP 1:3	M ²	0.14	0.022
3	Rough shahabad flooring 50 to 60mm thick on bed of 1:6 CM with CP 1:3	M ²	0.15	0.022
4	Rough shahabad flooring 12 to 20mm thick on bed of 1:6 CM with CP 1:3	M ²	0.135	0.022
5	Polished shahabad/tandur/kotah stone flooring 25 to 30mm thick on bed of 1:6 CM	M ²	0.135	0.022
6	Polished shahabad/tandur/kotah stone flooring 25 to 30mm thick on bed of 1:6 CM with kadappa border	M ²	0.135	0.022
7	Polished shahabad/tandur/kotah stone flooring 25 to 30mm thick for dado on 1:4 cement mortar plaster	M ²	0.185	0.022

Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Metal	
					20mm in M3	12/10mm in M3
8	IPS flooring in 1:2:3 proportion 40mm thick	M ²	0.334	0.020	0.023	0.007
9	IPS flooring in 1:2:3 proportion 50mm thick	M ²	0.406	0.025	0.028	0.010
10	IPS flooring in 1:2:4 proportion 40mm thick	M ²	0.300	0.018	0.027	0.080
11	IPS flooring in 1:2:4 proportion 50mm thick	M ²	0.365	0.022	0.033	0.011

Sr. No.	Item	Unit	Cement in bags	Screened Sand in M ³
12	Plain cement tile 25 x 25 cm flooring on bed of 1:6 cement mortar	M ²	0.135	0.02
13	Plain cement tiles for dado and skirting on 1:4 cement mortar plaster	M ²	0.185	0.02
14	Plain coloured cement tiles for flooring on bed of 1:6 CM	M ²	0.135	0.02
15	Plain coloured cement tiles for dado on plaster of 1:4 cement mortar	M ²	0.185	0.02
16	White glazed tiles 150 x 150 mm for flooring on 1:4 CM	M ²	0.20	0.02
17	White glazed tiles 150 x 150 mm for dado on 1:4 cement mortar plaster	M ²	0.20	0.02

Sr. No.	Item	Unit	Cement in bags	Screened Sand in M ³
18	Coloured glazed tiles 150 x 150 mm for flooring on bed of 1:4 CM	M ²	0.20	0.02
19	Coloured glazed tiles of 150 x 150 mm for dado on 1:4 cement mortar plaster	M ²	0.20	0.02
20	Gray / White cement based marble mosaic tiles for dado and skirting on 1:4 cement plaster	M ²	0.135	0.02
21	Gray / White cement base marble mosaic tiles for dado and skirting on 1:4 cement plaster bed	M ²	0.185	0.02
22	P & L Machine cut marble slab 60 x 45 cm flooring on 1:6 cement mortar bed	M ²	0.135	0.022
23	P & L Machine cut marble slab dado and skirting on 1:4 cement mortar plaster	M ²	0.185	0.02

Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Crushed metal 12/10mm in M ³
24	P & L in situ cement marble mosaic 10mm thick for flooring	M ²	0.20	0.0136	0.0272

Sr. No.	Item	Unit	Cement in bags	Screened Sand in M ³
25	Providing and laying in situ cement mosaic dado and skirting 6mm thick on plaster in CM 1:3	M ²	0.20	0.02
26	P & L flooring of Tukda mosaic/china mosaic (broken mosaic tile pieces) on bed of 1:4 cement mortar	M ²	0.30	0.024
27	P & L polished shahabad/ tandur kotah stone slab for treads and risers on bed of 1:4 CM	M ²	0.185	0.02
28	Polished shahabad stone 40 to 50 mm for treads and risers in CM 1:4	M ²	0.185	0.02
29	Plain cement tiles/plain coloured cement tiles for treads and risers on bed of 1:4 CM	M ²	0.185	0.02
30	Marble mosaic tiles for treads and risers on bed of 1:4 cement mortar	M ²	0.185	0.02
31	Marble slabs 20mm thick for treads and risers	M ²	0.185	0.02
32	Rough shahabad stone 40 to 50 mm for sills on bed of 1:4 CM	M ²	0.185	0.02
33	Polished shahabad tandur/kotah/kadappa stone 40 to 50 mm thick sill on bed of 1:4 CM	M ²	0.185	0.02
34	Providing sills of precast marble mosaic tiles on bed of 1:4 CM	M ²	0.185	0.02
35	White marble slabs dado and skirting	M ²	0.185	0.02

36	35mm thick precast polished chequered tiles / colored cement tiles and treads and plain cement tiles for risers	M ²	0.16	0.02
37	Polished chequered marble mosaic tiles 20 x 32 cm size for flooring / treads	M ²	0.16	0.02
38	Marble/Kadappa/tandur stone partition for urinals	M ²	0.05	0.005
39	White glazed tiles / colour glazed tiles of 200 x 100mm for flooring on 1: 4 CM	M ²	0.22	0.02
40	White glazed / colour glazed tiles of 200 x 100mm for dado and skirting	M ²	0.21	0.02
41	25mm thick polished kadappa sills on bed of 1:4 CM	M ²	0.04	0.02
42	30 x 30 cm ceramic tile flooring on bed of 1:4 CM	M ²	0.20	0.017

Bd - W. Miscellaneous					
Sr. No.	Item	Unit	Cement in bags	Screened sand in M3	Crushed metal 12/10mm in M3
1	Guiniting by dry mix process in 1:3 1/2 CM for ceiling and soffit				
(A)	a) 20mm thick	M ²	0.23	0.028	-
	b) 25mm thick	M ²	0.29	0.035	-
	c) 40mm thick	M ²	0.46	0.056	-
	d) 50mm thick	M ²	0.576	0.070	-
(B)	Guiniting by dry mix process in 1:3 1/2 CM for beams				
	a) 20mm thick	M ²	0.237	0.028	-
	b) 25mm thick	M ²	0.296	0.036	-
	c) 40mm thick	M ²	0.472	0.057	-
	d) 50mm thick	M ²	0.600	0.072	-
(C)	Guiniting by dry mix process in 1:3 1/2 CM for columns				
	a) 20mm thick	M ²	-	-	-
	b) 25mm thick	M ²	0.256	0.034	-
	c) 40mm thick	M ²	0.444	0.054	-
	d) 50mm thick	M ²	0.550	0.067	-
(1)	Vertical surfaces other than columns in 1:3 1/2 CM				
	a) 20mm thick	M ²	0.206	0.025	-
	b) 25mm thick	M ²	0.257	0.031	-
	c) 40mm thick	M ²	0.411	0.050	-
	d) 50mm thick	M ²	0.514	0.062	-

2	P & E 1.50m high wire fencing wire fencing with 7 rows of bar bed wire fencing with MS angles at 2.50 M c/c in cc 1:4:8 blocks of 45 x 45 x 45cm	M	0.132	0.018	0.036
3	P & E 1.50m high wire fencing wire fencing with 7 rows of bar bed wire fencing with wooden round bullies	M	0.132	0.018	0.036
4	P & E chain line fencing with CC 1:4:8 blocks of 45 x 45 x 45cm at 1.75m c/c	M	0.310	0.042	0.085

Bd - V. Water Supply & Sanitary

Sr. No.	Item	Unit	Cement in bags	Sand in M ³	Bricks in Numbers	Metal in M ³
1	Water meter chamber in brick masonry with cement plaster 15mm dia to 100mm dia	No.	0.52	0.103	134	0.025
2	45cm wide steel ladder with CC 1:2:4 block of 60 x 30 x 30 cm	No.	0.35	0.024	-	0.048
3	Indian type W.C. pan	No.	0.20	0.02	-	-
4	Orissa type W.C. pan	No.	0.25	0.018	-	-
5	European type W.C. pan	No.	0.25	0.035	-	-
6	Renewing Indian type W.C. pan	No.	0.25	0.035	-	-
7	Full stall type urinal	No.	0.10	0.01	-	-
8	Lipped flat back type urinal	No.	0.10	0.01	-	-
9	Half round white glazed	No.	0.15	0.02	-	0.02
10	Half round salt glazed stone ware pipe in brick masonry	M	0.10	0.02	31	-
11	White glazed earthenware wash hand basin	No.	0.10	0.01	-	-
12	White glazed earthenware sink	No.	0.10	0.01	-	-
13	Nahani trap 8 cm or 10cm dia	No.	0.10	0.01	-	-
14	Gully trap 15 x 10 cm with brick chamber	No.	0.55	0.08	52	0.05
15	Brick masanory inspection chamber 60 x 45 cm and 60cm depth with cement plaster	No.	2.33	0.35	350	0.194
16	Brick masanory inspection chamber 90 x 45 cm and 60cm depth with cement plaster	No.	3.53	0.54	527	0.3
17	Intercepting trap chamber 90 x 45 cm with brick masonry with cement plaster	No.	3.90	0.57	450	0.45
18	Circular manhole 45cm diameter at top and 90cm at bottom and 1.80 to 2.70m depth with cement plaster	No.	6.70	-	-	-

Sr. No.	Item	Unit	Cement in bags
19	Cast iron rain water pipe 75/100/150mm dia	M	0.003
20	Asbestos cement rain water pipe 100/150mm dia	M	0.005
21	Cast iron soil/waste water/vent pipe of 80/100/150mm dia	M	0.007
22	Asbestos cement soil/waste water/vent pipe of 75/100/150 mm dia	M	0.007
23	Salt glazed stoneware pipe 100mm dia	M	0.035
24	Salt glazed stoneware pipe 150mm dia	M	0.045
25	Salt glazed stoneware pipe 225mm dia	M	0.080

**THEORITICAL REQUIREMENT OF MATERIALS OF BLACK TOP ROAD ITEMS
(AS PER STANDARD SPECIFICATIONS)**

Sr. No	Item	Unit	Asphalt in Kg	Coarse Aggregate					
				40mm in m ³	25mm in m ³	20mm in m ³	12mm in m ³	10mm in m ³	6mm in m ³
1	Providing 50mm thick full grout with seal coat	100 M ²	Dose 500.00 Seal coat <u>125.00</u> Total 625.00	6.00	-	-	1.50	1.20	-
2	Providing 50mm thick semi frouit with seal coat	100 M ²	Dose 275.00 Seal coat <u>125.00</u> Total 400.00	6.00	-	-	1.50	1.20	-
3	Providing 40mm thick premix carpet	100 M ²	304	-	2.45	-	2.73	-	0.60
4	Providing 25mm thick premix carpet	100 M ²	205	-	-	1.85	-	1.20	0.60
5	Providing 20mm thick premix carpet	100 M ²	156	-	-	-	1.83	0.90	0.15
6	Single coat surface dressing on WBM surface	100 M ²	200	-	-	-	1.50	-	-
7	Single coat surface dressing on BT surface	100 M ²	125	-	-	-	1.05	-	-
8	Two coat surface dressing	100 M ²	Dose 225.00 Seal coat <u>125.00</u> Total 350.00	-	-	-	1.80	1.00	-
9	Bituminous liquid seal coat	100 M ²	98	-	-	-	-	-	0.90
10	50mm thick special grout bituminous surface including tack coat and seal coat	100 M ²	Tack coat 73.50 Dose 40.00 Seal coat <u>97.50</u> Total 611.00	-	-	-	1.80	0.90	-
11	Tack coat on WBM surface	100 M ²	100	-	-	-	-	-	-
12	Tack coat on BT surface	100 M ²	50	-	-	-	-	-	-
13	Emulsion tack coat on WBM surface	100 M ²	35	-	-	-	-	-	-
14	Emulsion tack coat on BT surface	100 M ²	25	-	-	-	-	-	-
15	25mm thick hot mix hot laid carpet	100 M ²	209	-	-	1.85	-	1.20	0.60
16	20mm thick hot mix laid carpet(open graded premix carpet)	100 M ²	146	-	-	1.83	-	0.90	0.15
17	a) 75mm thick bituminous bound macadam surface on BT surface	100 M ²	250	9.00	-	1.5	1.80	-	-
	b) On WBM surface	100 M ²	200	9.00	-	1.5	1.80	-	-
18	Granular sub-base	M ³							
19	Shoulder drain	M							

**THEORITICAL MATERIAL REQUIREMENT
AS PER STANDARD SPECIFICATIONS
(REQUIREMENT OF MATERIALS SHALL BE AS PER ACTUAL JOB MIX
BRIDGE AND C.D. WORKS**

Sr. No.	Item	Unit	Cement in bags	Screened sand in M ³	Course Aggregate		
					40mm in M ³	20mm in M ³	12/10mm in M ³
1	Plain cement concrete 1:5:10	M ³	2.60	0.47	0.94	-	-
2	Plain cement concrete 1:4:8	M ³	3.40	0.47	0.94	-	-
3	Plain cement concrete 1:3:6	M ³	4.40	0.47	0.70	0.24	-
4	Plain cement concrete 1:2:4	M ³	6.40	0.445	-	0.67	0.22
5	M-10 grade concrete	M ³	4.40	0.47	0.70	0.24	-
6	M-15 grade concrete	M ³	6.00	0.445	-	0.67	0.22
7	M-20 grade concrete	M ³	7.00	0.445	-	0.67	0.22
8	M-25 grade concrete	M ³	7.50	0.445	-	0.67	0.22
9	M-30 grade concrete	M ³	8.00	0.425	-	0.57	0.28
10	M-35 grade concrete	M ³	8.25	0.47	-	0.57	0.28
11	Cast in situ abutment and piers in M-10	M ³	4.40	0.47	0.70	0.57	-
12	Cast in situ abutment and piers in M-15	M ³	6.00	0.47	0.70	0.24	-
13	Cast in situ abutment and piers in M-20	M ³	7.00	0.47	0.70	0.24	-
14	Cast in situ abutment and piers in M-10 with 15% plum	M ³	3.90	0.40	0.55	0.24	0.15
15	Cast in situ abutment and piers in M-15 with 15% plum	M ³	5.80	0.40	0.55	0.24	0.15

Sr. No.	Item	Unit	Cement in bags	Screened sand in M ³	Trap Rubble in M ³	Corner/Quins in Nos	Trap Header in Nos	Khandki in Nos
16	CR masonry in CM 1:5 for parapet with Khandki facing and pointing in CM 1:3	M ³	2.90	0.28	12	-	0.17	110
17	Rubble filling behind the abutment	M ³	-	-	-	-	1.00	- Gravel
18	Trap rubble filling in foundation	M ³	-	-	-	-	1.00	in
19	Providing Khandki paving of 23cm thick in 1:3 cement mortar over 15cm bed of CC 1:4:8 and poiting in CM 1:3	M ³	1.21	0.15	40mm crushed metal in m ³ 0.141	Khandki in Nos 5		M ³ 0.33

RCC PIPES

Sr. No.	Item	Unit	Cement in bags	Sand in M3	Weight of pipe in kg./m.	
					NP-2 pipes	NP-3 pipes
1	P & L cc pipes of NP-2 class/ IRC pipes of NP-3 class					
	i) 80mm Ø	M	-	-	20	-
	ii) 100mm Ø	M	-	-	24	-
	iii) 150mm Ø	M	-	-	33	-
	iv) 250mm Ø	M	-	-	52	-
	v) 300mm Ø	M	-	-	75	-
	vi) 350mm Ø	M	-	-	92	240
	vii) 400mm Ø	M	-	-	104	269
	viii) 450mm Ø	M	0.12	0.009	128	297
	ix) 500mm Ø	M	-	-	141	325
	x) 600mm Ø	M	0.16	0.011	193	410
	xi) 700mm Ø	M	-	-	223	470
	xii) 800mm Ø	M	0.188	0.012	287	604
	xiii) 900mm Ø	M	0.22	0.0154	358	754
	xiv) 1000mm Ø	M	0.25	0.017	438	829
	xv) 1100mm Ø	M	-	-	525	1054
	xvi) 1200mm Ø	M	0.26	0.018	620	1140

**THEORITICAL MATERIAL REQUIREMENT
M.O.S.T. 2013 EDITION AND DATA BOOK**

(Grading Mateial shall be as per actual job mix formula wherever applicable)

1) Primer coat over Granular base (Table : 500.1 Page 145)

Cut back MC-70 or any other
bitumen mixed with Diesel

i) Low porosity surface such as wet mix macadam and waterbound macadam	6 to 9 kg/10 m ²
ii) Medium porosity surface such as cement stabilised soil base	12 to 15 kg/10 m ²
iii) High porosity surface such as grave base	12 to 15 kg/10 m ²

2) Bituminous tack coat (Table : 500.2 Page 149)

i) Normal bituminous surfaces	2.00 to 2.50 kg/10 m ²
ii) Dry and hungry bituminous surfaces	2.50 to 3.00 kg/10 m ²
iii) Granular surfaces treated with primer	2.50 to 3.00 kg/10 m ²
iv) Non bituminous surfaces	
a) Granular base (Not primed)	3.50 to 4.00 kg/10 m ²
b) Cement concrete pavement	3.00 to 3.50 kg/10 m ²

**3A) Bituminous macadam with 4% bitumen by weight
of total mix (Data book) (Density 2.20) Clause no. 504
(Excluding primer / tack coat)**

A) Bitumen		88 Kg/M ³
B) Coarse aggregate	11.20 to	0.835 M ³
C) Chipping	2.80 to 11.20mm	0.209 M ³
D) Fine aggregate	Below 2.80mm	0.366 M ³
		Total 1.380 M³

3B) Bituminous macadam with 3.50% bitumen by weight

A) Bitumen		77 Kg/M ³
B) Coarse aggregate	11.20 to 26.40mm	0.835 M ³
C) Chipping	2.80 to 11.20mm	0.209 M ³
D) Fine aggregate	Below 2.80mm	0.366 M ³
		Total 1.380 M³

3C) Bituminous macadam with 3% bitumen by weight of total mix

A) Bitumen		66 Kg/M ³
B) Coarse aggregate	11.20 to 26.40mm	0.835 M ³
C) Chipping	2.80 to 11.20mm	0.209 M ³
D) Fine aggregate	Below 2.80mm	0.366 M ³
Total		1.380 M³

4) Bituminous modified Penetration macadam (IRC:SP-20:2002)

Compacted Thickness	Bitumen	Coarse Aggregate	Key Aggregate
50mm ---	17.5Kg/10M ²	0.60 M ³ /10 m ²	0.18 M ³ /10 m ²
75mm ---	20.00Kg/10M ²	0.90 M ³ /10 m ²	0.18 M ³ /10 m ²

5) Built up Spray Grout (Excluding Primer/ Tack coat) clause no. 506

A) Bitumen		30 Kg/10 sqm
B) Coarse aggregate	11.20 to 26.40mm Crushed stone coarse aggregate passing 53.00 mm and retained on 2.80 mm	1 cum per 10 sqm
C) Fine aggregate	Below 2.80mm Key aggregate passing 22.40 mm and retained on 2.80 mm	0.13 cum per 10 sqm

Total 1.13 M³

6) Dense Bituminous Macadam (Density 2.30) 40mm compacted thickness with bitumen at 5% of total mix (Excluding primer coat/tack coat) Clause no. 507

i. Bitumen	120.00 Kg	}	1.528 M ³
ii. 20mm	0.61 M ³		
iii. 10mm	0.459 M ³		
iv. 5.60mm and below	0.459 M ³		
v. Cement filler	0.046 M ³		

7 A) Surface dressing (Table 500.13 page 170)

	Bitumen	Stone chipping
i) Single coat surface dressing or 1st coat of two coat surface dressing		10 mm size
i) Over B.T. Surface	27.50 kg/10m ²	0.105 m ³ / 10 m ²
ii) Over B.T. W.B.M.	20.00 kg/10m ²	12 mm size
ii) Second coat of two coat surface dressing (or as a renewal coat)	10.00 Kg/10M ²	0.15 m ³ /10 ²
i) Single coat surface dressing or 1st coat of two coat surface dressing	12 to 14 Kg/10M ²	0.10 M ³ /10M ²
i) 1st Coat	22.50 kg/10 m ²	10 mm size
ii) 1st Coat	12.50 kg/10 m ²	0.18 m ³ /10m ²
		12 mm size
		0.10 m ³ / 10m ²

8) Open graded premix carpet 20mm thick (Table 500.16 Page 178) Clause no. 509

i) 13.20mm Nominal size	0.18 M ³ /10M ²
ii) 11.20mm Nominal size	0.09 M ³ /10M ²
iii) Bitumen binder	14.6 Kg/10M ²

9) Mix seal surfacing (Excluding tack coat) Data book clause no. 510

	Bitumen	13.20mm	11.20mm	5.60mm	5.60mm & below	Crushed Sand
Type - A	22.00 Kg/10M ²	-	0.10 M ³ /10M ³	0.12 M ³ /10M ²	-	0.05 M ³ /10M ²
Type - B	19.00 Kg/10M ²	0.04 M ³ /10M ³	0.14 M ³ /10M ²	-	0.09 M ³ /10M ²	

10) Bituminous Concrete (Excluding primer /tack coat with cement filler)
Density 2.40 Data Book bitumen content at 6.50 %

i) Coarse aggregate	(64%)	1.006M ³	Total
ii) Fine aggregate	(36%)	0.566M ³	1.572M ³
iii) Cement	3%	0.072MT/M ³	
iv) Bitumen at	6.50%	156 Kg/M ³	

11) Seal coat (Data Book)

i) Stone chipping	6.70mm	0.09 M ³ /10M ²
ii) Bitumen		9.80 Kg/10M ²

12) P & L semidense bituminous concrete with 5.50% Bitumen Clause No. 511
(Excluding primer/tack coat)

.1. Crushed stone			
i) 13.20mm		0.40 M ³ /M ³	
ii) 11.20mm		0.64 M ³ /M ³	Total
iii) 5.60mm and below		0.44 M ³ /M ³	1.48 M ³
.2. Bitumen			
		124 Kg/M ³	

13) Providing and applying premixed seal coat type "B" Clause no. 513

i) Sand or grit passing 2.36mm and retained on 180 micron	0.060 M ³ /10M ²
ii) Bitumen	6.80 Kg/10M ²

THEORITICAL MATERIAL REQUIREMENT
M.O.S.T. 2013 EDITION AND DATA BOOK
(REQUIREMENT OF MATERIALS SHALL BE AS PER ACTUAL JOB MIX
BRIDGES AND CULVERTS

Sr. No. of Data book	Item	Unit	Cement in MT	Coarse Sand in M ³	Course Aggregate		
					40mm in M ³	20mm in M ³	10mm in M ³
2.3 (i)	PCC / RCC in open foundation						
	a) PCC M-25 grade	M ³	0.40	0.365	0.382	0.304	0.294
	b) PCC M-30 grade	M ³	0.42	0.365	0.382	0.299	0.304
	c) RCC M-35 grade	M ³	0.475	0.40	-	0.57	0.28
2.3 (ii)	d) RCC M-40 grade	M ³	0.50	0.40	-	0.57	0.28
	a) PCC M-15	M ³	0.33	0.45	0.52	0.22	0.11
	b) i) PCC M-20	M ³	0.38	0.45	0.57	0.22	0.11
	c) ii) RCC M-20	M ³	0.40	0.425	-	0.57	0.28
2.5 (i)	c) RCC M-25	M ³	0.41	0.45	-	0.63	0.27
	a) PCC/RCC Well Curb						
	i) RCC M-35 grade	M ³	0.475	0.40	-	0.57	0.28
	ii) RCC M-40 grade	M ³	0.50	0.40	-	0.57	0.28
	b) Well Steining						
	i) PCC M-25 grade	M ³	0.40	0.365	0.382	0.304	0.294
	ii) PCC M-30 grade	M ³	0.42	0.365	0.382	0.304	0.299
	iii) RCC M-35 grade	M ³	0.475	0.40	-	0.57	0.28
	iv) RCC M-40 grade	M ³	0.50	0.40	-	0.57	0.28
	c) Bottom Plug M-25	M ³	0.44	0.365	0.382	0.304	0.299
			(including 10% extra)				
	d) Top & Intermediate plug in PCC M-25	M ³	0.40	0.365	0.382	0.304	0.294
2.5 (ii)	e) Well cap in RCC M-35	M ³	0.46	0.365	0.382	0.304	0.299
	a) Well curb						
	i) RCC M-20	M ³	0.40	0.425	-	0.57	0.28
	ii) RCC M-25	M ³	0.41	0.45	-	0.63	0.27

	b) Well Steining						
	b) i) PCC M-15	M ³	0.33	0.45	0.52	0.22	0.11
	c) ii) a) PCC M-20	M ³	0.38	0.45	0.57	0.22	0.11
	c) iii) b) RCC M-20	M ³	0.40	0.425	-	0.57	0.28
	b) iii) RCC M-25	M ³	0.41	0.45	-	0.63	0.27
	c) Bottom Plug						
	PCC M-20 ggrade	M ³	0.418 (including 10% extra)	0.45	0.57	0.22	0.11
	d) Top & Intermediate plug						
	PCC M-15	M ³	0.33	0.45	0.52	0.22	0.11
	e) Well cap						
	i) RCC M-20 grade	M ³	0.38	0.45	0.57	0.22	0.11
	ii) RCC M-25 grade	M ³	0.40	0.365	0.382	0.304	0.299
	iii) RCC M-30 grade	M ³	0.42	0.365	0.382	0.304	0.299
3.3	a) PCC/RCC for sub structure						
	i) PCC M-25 grade	M ³	0.40	0.365	0.382	0.304	0.299
	ii) PCC M-30 grade	M ³	0.42	0.365	0.382	0.299	0.304
	iii) RCC M-35 grade	M ³	0.46	0.365	0.382	0.304	0.299
	iv) RCC M-40 grade	M ³	0.50	0.40	-	0.57	0.28
	b) PCC/RCC for sub						
	i) PCC M-15 grade	M ³	0.33	0.45	0.52	0.22	0.11
	ii) PCC M-20 grade	M ³	0.38	0.45	0.57	0.22	0.11
	iii) RCC M-20 grade	M ³	0.40	0.425	-	0.57	0.28
	iv) RCC M-30 grade	M ³	0.41	0.45	-	0.63	0.27
	v) RCC M-30 grade	M ³	0.45	0.43	-	0.58	0.28
4.1	i) RCC Superstructure						
	a) RCC M-35 grade	M ³	0.475	0.40	-	0.57	0.28
	b) RCC M-40 grade	M ³	0.50	0.40	-	0.57	0.28
	ii) a) RCC M-25 grade	M ³	0.41	0.45	-	0.63	0.27
	b) RCC M-30 grade	M ³	0.45	0.43	-	0.58	0.28

4.2	Prestressed concrete						
	a) M-35 grade	M ³	0.475	0.40	-	0.57	0.28
	b) M-40 grade	M ³	0.50	0.40	-	0.57	0.28
	c) M-45 grade	M ³	0.52	0.40	-	0.57	0.28
	d) M-50 grade	M ³	0.54	0.40	-	0.57	0.28
4.5	RCC Wearing Coarse						
	M-30	M ³	0.45	0.43	-	0.58	0.28
4.8	RCC Railing M-30		0.021	0.02	-	0.027	0.013
4.12	RCC Approach slab						
	i) M-25 grade	M ³	0.41	0.45	-	0.63	0.27
4.13	PCC Leveling coarse of M-15 below approach slab	M ³	0.33	0.45	0.52	0.22	0.11
1.3 & 4	PCC Blocks						
	M-15	M ³	0.33	0.45	0.52	0.22	0.11
	Culverts						
	PCC 1:4:8	M ³	0.17	0.47	0.89	-	-
	PCC 1:3:6	M ³	0.22	0.47	0.89	-	-
	PCC M-15 grade	M ³	0.33	0.45	-	0.85	-
	PCC M-20 grade	M ³	0.40	0.425	-	0.95	-

STATEMENT OF MATERIAL REQUIRED FOR VARIOUS WBM & B.T. ITEMS

Sr. No.	Item of Works	Ref. of e-ssr 2019-20 item no.	Material	Material Requirement	Per Unit
1	Granular Sub Base (GSB) Plant Mix Method and Grading -I Material	3.01	53 mm to 9.5 mm	0.640	Cum/Cum
			9.5 mm to 2.36 mm	0.256	Cum/Cum
			2.36 mm below	0.384	Cum/Cum
2	Granular Sub Base (GSB) Plant Mix Method and Grading -II Material	3.02	26.5 mm to 9.5 mm	0.448	Cum/Cum
			9.5 mm to 2.36 mm	0.320	Cum/Cum
			2.36 mm below	0.512	Cum/Cum
3	Granular Sub Base (GSB) Plant Mix Method and Grading -III Material	3.03	9.50 mm to 4.75 mm	0.448	Cum/Cum
			4.75. mm to 2.36 mm	0.160	Cum/Cum
			2.36 mm below	0.672	Cum/Cum
4	Granular Sub Base (GSB) Mix in Place Method and Grading -I Material	3.04	53 mm to 9.5 mm	0.640	Cum/Cum
			9.5 mm to 2.36 mm	0.256	Cum/Cum
			2.36 mm below	0.384	Cum/Cum
5	Granular Sub Base (GSB) Mix in Place Method and Grading -II Material	3.05	26.5 mm to 9.5 mm	0.448	Cum/Cum
			9.5 mm to 2.36 mm	0.320	Cum/Cum
			2.36 mm below	0.512	Cum/Cum
6	Granular Sub Base (GSB) Mix in Place Method and Grading -III Material	3.06	9.50 mm to 4.75 mm	0.448	Cum/Cum
			4.75. mm to 2.36 mm	0.160	Cum/Cum
			2.36 mm below	0.672	Cum/Cum
7	WBM Grading - I Using Screening - Type A	3.18	90 mm to 45 mm	1.21	Cum/Cum
			Type A 13.2 mm	0.270	Cum/Cum
			Binding material	0.08	Cum/Cum
8	WBM Grading - I Using Screening - Type B	3.19	90 mm to 45 mm	1.21	Cum/Cum
			Type B 11.2 mm	0.240	Cum/Cum
			Binding material	0.08	Cum/Cum

Sr. No.	Item of Works	Ref. of e-ssr 2019-20 item no.	Material	Material Requirement	Per Unit
9	WBM Grading - II Using Screening - Type B	3.2	63 mm to 45 mm	1.21	Cum/Cum
			Type B 11.2 mm	0.240	Cum/Cum
			Binding material	0.08	Cum/Cum
10	50 mm Modified Penetration Mecadam (MPM) over WBM CB-30% & HB-70%	3.37a	HB metal	0.042	Cum/Sqm
			CB metal	0.033	Cum/Sqm
			Bulk Bitumen (VG-30)	0.00175	M.T./Sqm
11	50 mm Modified Penetration Mecadam (MPM) over WBM	3.37b	CB metal	0.075	Cum/Sqm
			Bulk Bitumen (VG-30)	0.00175	M.T./Sqm
12	50 mm Modified Penetration Mecadam (MPM) over BT CB-30% & HB-70%	3.38a	HB metal	0.042	Cum/Sqm
			CB metal	0.033	Cum/Sqm
			Bulk Bitumen (VG-30)	0.00175	M.T./Sqm
13	50 mm Modified Penetration Mecadam (MPM) over BT	3.38b	CB metal	0.075	Cum/Sqm
			Bulk Bitumen (VG-30)	0.00175	M.T./Sqm
14	75 mm Modified Penetration Mecadam (MPM) over WBM CB-30% & HB-70%	3.35a	HB metal	0.063	Cum/Sqm
			CB metal	0.045	Cum/Sqm
			Bulk Bitumen (VG-30)	0.002	M.T./Sqm
15	75 mm Modified Penetration Mecadam (MPM) over WBM	3.35b	CB metal	0.108	Cum/Sqm
			Bulk Bitumen (VG-30)	0.002	M.T./Sqm
16	75 mm Modified Penetration Mecadam (MPM) over BT CB-30% & HB-70%	3.36a	HB metal	0.063	Cum/Sqm
			CB metal	0.045	Cum/Sqm
			Bulk Bitumen (VG-30)	0.002	M.T./Sqm
			Bulk Bitumen (VG-10)	0.0003	M.T./Sqm
17	75 mm Modified Penetration Mecadam (MPM) over BT CB-100%	3.36b	CB metal	0.108	Cum/Sqm
			Bulk Bitumen (VG-30)	0.002	M.T./Sqm
			Bulk Bitumen (VG-10)	0.0003	M.T./Sqm

BASIC QUALITY CONTROL
TESTS & THEIR FREQUENCIES

BASIC QUALITY CONTROL TESTS& THEIR FREQUENCIES

FLEXIBLE PAVEMENT.

A) Sub-grades

S. No.	Type of Construction	Test	Frequency (Min.)	Reference
1	2	3	4	5
1)	Subgrade /Earth work. & Earthen Shoulders	i) CBR. ii) Plastic Index. iii) Moisture Content Prior to compaction. iv) Density of compacted layer.	One test (average of 3 specimens) per 3000 cu.m. 2 test per 3000 cum. 2 test per 3000 cum. One set of 10 measurements of Density for each 3000 sqm. on each layer.	MOR T & H Specifications 2013 Section 900 (903.2)

B) Sub-base & base work.

S. No.	Type of Construction	Test	Frequency (min.)	Reference
1	2	3	4	5
1)	Lime/Cement /Fly AshStabilised Soil Sub Base.	A)Quality of cement a) Consistency. b) Initial & Final setting time. c) Fineness. d) Specific Gravity. e) Soundness. f) Compressive strength.	One test for each consignment subject to a minimum of one test per 5 tonnes.	MORT & H Specifications 2013 Section 900 (Table 900-3)

		<u>B)Quality of FlyAsh:-</u> i) Specific Gravity. ii)Fineness. iii) CBR iv) Moisture Content prior to compaction. v) Density of compacted layer.	One tests for each consignment. One tests for each consignment. Two test per every 3000 cum. One test per every 250 cum. At least one measurement of density for each 1000 sqm.	IS:2720 (Part -8) 1983 IS: 2720 (Part -8) 1983 IS: 2720 (Part -2) 1973 IS 1720 (Part : 28)
2)	Granular Sub-base	i) Gradation ii) Atterberg limits iii) Moisture content prior to compaction iv)Densityof compacted layer v) Wet aggregate Impact value if water absorption of the aggregate is more than 2% vi) CBR	One test per 400 cu.m One test per 400 cu.m One test per 400 cu.m One test per 1000 sq.m. One test per source. As required.	MORTH Specifications 2013 section 900 (Table -900-3)
3)	Water Bound Macadam	i) Aggregate Impact Value. ii)Grading of aggregate iii)Combined flakiness and ElongationIndices. iv) Atterberg limits of binding material. v) Atterberg limits of screenings.	One test per 1000 cu.m. of aggregate. One tests per 250 cu.m One test per 500 cu.m. of aggregate. One test per 50 cu.m of binding material. One test per 100 cu.m. of aggregate.	MORTH Specifications 2013 section 900 (Table -900-3)

4)	Wet Mix Macadam	i) Aggregate Impact Value. ii) Grading of aggregate. iii) Combined flakiness and Elongation Indices. iv) Atterberg limits of portion of passing 425 micron sieve. v) Density of compacted layer	One test per 1000 cu.m. of aggregate. One test per 200 cu.m. of aggregate. One test per 500 cu.m. of aggregate. One test per 200 cu.m. of aggregate. One set of three tests per 1000sqm.	MORTH Specifications 2013 section 900 (Table -900.4)
5	BBM / MPM .	<u>i) Quality of binder</u> a) Specific Gravity b) Flash and Fire point, c) Softening point d) Penetration Test e) Ductility Test f) Viscosity. (Absolute ,Kinematic) g) Binder temperature for application ii) Aggregate. Impact Value. iii) Grading of aggregate. iv) Combined flakiness and Elongation Indices. v) Stripping Value v) Water absorption of	Two Sample per lot to be subjected to all or some test as directed by engineer. At regular close interval One test per 2000cu.m. of aggregate. One tests per 100cu.m of aggregate. One tests per 200 cu.m of aggregate . Initially One set of three representative specimens for each source of supply subsequently when warranted by changes in the quality of aggregate .	IRC:SP:20-2002

		aggregate . vi) Temperature of binder at application aggregate . vii) Rate of spread of binder .	Initially One set of three representative specimens for each source of supply subsequently when warranted by changes in the quality of aggregate . At regular close intervals. One tests per 500sq.m of area.											
6	BUSG	<u>i) Quality of binder</u> a) Specific Gravity b) Flash and Fire point, c) Softening point d) Penetration Test e) Ductility Test f) Viscosity. (Absolute ,Kinematic) g) Binder temperature for application ii) Aggregate. Impact Value. or Abrasion Value iii)Grading of aggregate. iv)Combined flakiness and Elongation Indices. v)Stripping Value	<table><tr><th>Lot size</th><th>No. of container</th></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table> One test per 200 cu.m. of aggregate. One tests per 100 cu.m of aggregate. One tests per 200 cu.m of aggregate . Initially One set of three representative specimens for each source of supply subsequentlywhen warranted by changes in the quality of	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	IRC:47-1972 IS -73 As frequency for BUSG is not mention in IRC:47-1972 hence frequency for BBM & MPM as perIRC:SP-20-2002 is adopted. IS -2386 (Part-4) IRC:47-1972 IS -2386 (Part-1) IS -6241
Lot size	No. of container													
Up to 50 lots	3													
51 to 150	5													
151 to 500	7													
501&above	10													

		vi) Water absorption of aggregate .	aggregate . Initially One set of three representative specimens for each source of supply subsequently when warranted by changes in the quality of aggregate .	IS -2386 (Part-3)
7	Hard Murum	i)Atterbergs Limit	One test per 400 cu.m.	MORTH Specifications 2013 clause 900 (Table 900-3)

C)Bituminous works.

Sr. No.	Type of Construction	Test	Frequency (min.)	Reference									
1	2	3	4	5									
	Prime coat/ Tack Coat	i) <u>Quality of binder</u> a) Specific Gravity b) Flash and Fire point, c) Softening point d) Penetration Test e) Ductility Test f) Viscosity. (Absolute ,Kinematic) ii) Binder temperature for application iii) Rate of spread of Binder <table><tr><th>Lot size</th><th>No. of container</th></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table> At regular close intervals Three tests per day	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	MORT H Specifications 2013 section 900 (Table 900-4) IS:73 IS:217 & IS:8887.
Lot size	No. of container												
Up to 50 lots	3												
51 to 150	5												
151 to 500	7												
501&above	10												

2)	Seal coat/ Surface Dressing	<u>i) Quality of binder</u> a) Specific Gravity b) Flash and Fire point, c) Softening point d) Penetration Test e) Ductility Test f) Viscosity. (Absolute ,Kinematic)	<table><tr><td>Lot size</td><td>No. of container</td></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table>	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	MORT H Specifications 2013 section 900 (Table 900-4) IS:73 IS:217 & IS:8887.
Lot size		No. of container												
Up to 50 lots	3													
51 to 150	5													
151 to 500	7													
501&above	10													

3)	Open-graded Premix Surfacing/ Close-graded Premix Surfacing	i) <u>Quality of binder</u>	<table><tr><td>Lot size</td><td>No. of container</td></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table>	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	MORT H Specifications 2013 section 900 (Table 900-4) IS:73 IS:217 & IS:8887.
		Lot size	No. of container											
		Up to 50 lots	3											
		51 to 150	5											
		151 to 500	7											
		501&above	10											
		a) Specific Gravity												
		b) Flash and Fire point,												
		c) Softening point												
		d) Penetration Test												
e) Ductility Test														
f) Viscosity. (Absolute ,Kinematic)														
ii) Aggregate. Impact Value.	One test per 200 cu.m.of each source and whenever there is change in the quality of aggregate.													
iii) Combined Flakiness and Elongation Indices	One test per 100 cu.m. of for each source and whenever there is change in the quality of aggregate.													
iv) Stripping value	One test of each source and whenever there is change in the quality of aggregate.													
v) Water absorption of aggregate.	One test of each source and whenever there is change in the quality of aggregate.													
vi) Grading of aggregate.	Two tests per day.													
vii) Temperature of binder at application	At regular intervals													

4)	Bituminous Macadam	i) <u>Quality of binder</u>	<table><tr><td>Lot size</td><td>No. of container</td></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table>	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	MORT H Specifications 2013, section 900 (Table 900-4), IS:73, IS:217 & IS:8887.
		Lot size	No. of container											
		Up to 50 lots	3											
		51 to 150	5											
		151 to 500	7											
		501&above	10											
		a) Specific Gravity												
		b) Flash and Fire point,												
		c) Softening point												
		d) Penetration Test												
e) Ductility Test														
f) Viscosity. (Absolute ,Kinematic)														
ii) Aggregate Impact Value.	One test per 200 cu.m.of each source and whenever there is change in the quality of aggregate.													
iii) Combined Flakiness and Elongation Indices	One test per 350 cu.m. of aggregate for each source.													
iv) Stripping value	One test of each source and whenever there is change in the quality of aggregate.													
v) Water absorption of aggregate.	One test of each source and whenever there is change in the quality of aggregate.													
vi) Grading of aggregate.	Two tests per day.													
vii) Binder content.	Two tests per day per plant.													
viii)Control of temperature of binder &aggregate for mix aggregate of the mix at the time of laying & rolling.	At regular intervals.													
ix) Density of compacted Layer.	One test per 700 Sq.mt.area.													
x) Rate of Spread of mix.	At regular intervals.													

5)	Dense Bituminous Macadam/Bituminous Concrete	i) <u>Quality of binder</u>	<table><tr><td>Lot size</td><td>No. of container</td></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table>	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	MORT H Specifications 2013 section 900 (Table 900-4) IS :73 IRC SP 53 IS:15462
		Lot size	No. of container											
		Up to 50 lots	3											
		51 to 150	5											
		151 to 500	7											
		501&above	10											
		a) Specific Gravity												
		b) Flash and Fire point,												
		c) Softening point												
		d) Penetration Test												
e) Ductility Test														
f) Viscosity. (Absolute ,Kinematic)														
ii) Aggregate Impact Value.	One test per 350 cu.m of aggregate for each source and whenever there is change in the quality of aggregate.													
iii) Flakiness and Elongation Indices	One test per 350 cu.m of aggregate for each source and whenever there is change in the quality of aggregate.													
iv) Water absorption of aggregate.	One test for each source and whenever there is change in the quality of aggregate.													
v) Mix grading	One set for individual constituent and mixed aggregate from dryer for each 400 tones of mix subject to minimum of two tests per day per plant													
vi) Stability and voids analysis of mix including theoretical maximum specific of loose mix	Three tests for stability, flow value, density and void contents for each 400 tonnes of mix subject to minimum of two tests per day per plant.													
vii) Temperature of binder in boiler.	At regular intervals.													

		indryer and mix at the time of laying and compaction. viii) Binder content ix) Rate of spread of mix x) Density of Compacted layer	One set for each 400 tonnes of mix subject to minimum of two tests per day per plant After every 5 th truck load One test per 700 sq.m area	
6)	Slurry seal and Micro surfacing.	<u>i) Quality of binder</u> a) Specific Gravity b) Flash and Fire point, c) Softening point d) Penetration Test e) Ductility Test f) Viscosity. (Absolute ,Kinematic) 		

7)	Mastic Asphalt	i) Quality of binder a) Specific Gravity b) Flash and Fire point, c) Softening point d) Penetration Test e) Ductility Test f) Viscosity. (Absolute ,Kinematic) ii) Aggregate Impact Value. iii) Combined Flakiness and Elongation Indices iv) Striping value v) Grading of aggregates. vi) Water absorption of aggregates. vii) Binder content and aggregates grading of mix material. viii) Control of temperature of binder and aggregates for mixing and of the mix at the time of laying and rolling.	<table><tr><th>Lot size</th><th>No. of container</th></tr><tr><td>Up to 50 lots</td><td>3</td></tr><tr><td>51 to 150</td><td>5</td></tr><tr><td>151 to 500</td><td>7</td></tr><tr><td>501&above</td><td>10</td></tr></table> One tests per 350 cum.of aggregates for each source & whenever there is change in the quality of aggregates. One tests per 350 cum.of aggregates for each source & whenever there is change in the quality of aggregates. One test of each source & whenever there is change in the quality of aggregates. Two tests per day per plant on the individual constituent & mixed aggregate from the dryer. One test for each source and whenever there is change in the quality of aggregates. Two Test per day per plant. At regular close intervals	Lot size	No. of container	Up to 50 lots	3	51 to 150	5	151 to 500	7	501&above	10	MORT H Specifications 2013 section 900 (Table 900-4) IS:73 IRC SP 53 IS: 15462.
Lot size	No. of container													
Up to 50 lots	3													
51 to 150	5													
151 to 500	7													
501&above	10													

		ix) Rate of Spread of MixedMaterial.	Regular control through check of layer thickness.		
8)	Cold Mixes.	i) <u>Quality of binder</u>	Lot size	No. of container	MORT H Specifications 2013 section 900 (Table 900-4) IS:73 IRC SP 53 IS : 15462
		a) Specific Gravity	Up to 50 lots	3	
			51 to 150	5	
		b) Flash and Fire point,	151 to 500	7	
			501&above	10	
		c) Softening point			
		d) Penetration Test			
		e) Ductility Test			
		f) Viscosity. (Absolute ,Kinematic)			
		ii) Aggregate Impact Value.	One test per 350 cu.m.of each source and whenever there is change in the quality of aggregate.		
	iii) Combined Flakiness and Elongation Indices	One test per 350cu.m. of aggregates for each source and whenever there is change in the quality of aggregate.			
	iv) Water absorption of aggregate.	One test of each source and whenever there is change in the quality of aggregate.			
	v) Grading of aggregate.	Two tests per day.			
	vi) Temperature of binder at application	At regular intervals			
	vii) Binder content.	Two tests per day.			

BASIC QUALITY CONTROL TESTS & THEIR FREQUENCIES

RIGID PAVEMENT

Sr. No.	Material	Description of Test	Frequency Min.	Reference
1)	Cement (Physical Tests)	i) Compressive Strength. ii) Initial Setting Time. iii) Final setting Time. iv) Specific Gravity. v) Soundness. vi) Fineness.	Once for each source of supply & occasionally when called for in case of long/improper storage. Besides the contractor also will submit daily test data on cement released by the manufacturer.	M.O.R.T.H. Specification Section.903 (Table 900-6) IS : 269 IS: 455 IS: 1489 IS: 8112 IS : 12269
2)	Aggregate	i) Aggregate Impact Value iii) Gradation. iii) Water absorption.	Once for each source of supply & subsequently on monthly basis. one test for every days work of each fraction of course aggregate initially. One test per day.	M.O.R.T.H. Specification 2013, Section 903. (Table 900-6) IS 2386 (Part 4-IV) IS 2386 (Part- III)
3)	Sand	i) Fineness Modulus. ii) Water absorption.	At Beginning & if there is change in source. Two tests per day.	PWD HAND BOOK Chapter-3, for RCC, & M.O.R. T.H. Specification 2013, Section 903. (Table 900-6) IS : 2386 (Part- III)

4)	Cement Concrete	i) Compressive Strength. ii) Workability / Slump Test.	2 cubes & 2 beams per 150 cu.m. or part thereof (One for 7 days & other for 28 days strength) or minimum 6 cubes & 6 beams per day's work whichever is more. One test per each dumper load at both batching plant site & paving site initially when work starts. Subsequently sampling may be done from alternate dumper.	M.O.R.T.H. Specification 2013, Section 903. (Table 900-6) IS : 516
5)	Paver Blocks.	i) Compressive Strength ii) Water absorption	One test for 50,000 blocks & part thereof. One test for 50,000 blocks & part thereof.	IS: 15658 – 2006.
6)	Steel	i) Ultimate Tensile Stress. ii) Percentage Elongation. iii) Percentage Proof /yield Stress. iv) Weight per meter.	One test for every 5 metric tones or part thereof for each diameter of bar. One test for every 5 metric tones or part thereof for each diameter of bar. One test for every 5 metric tones or part thereof for each diameter of bar. One test for every 5 metric tones or part thereof for each diameter of bar.	IS:432 (Part-II)

Government of Maharashtra
Vigilance & Quality Control Circle

Pune/ Navi Mumbai/ Nasik/ Amravati/ Aurangabad & Nagpur

**Schedule of Testing charges for Construction Material used for
Government Works for the Year 2020-21**

(Effective from 01/07/2020)

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1)	Important Notes	1	1
2)	Schedule of Rate for Construction Material Testing Charges	2	7

Government of Maharashtra

Vigilance & Quality Control Circle

Schedule of Testing charges for Construction Material used for
Government Works for the Year 2020-21
(Effective from 01/07/2020 and valid up to 30.6.2021)

Important Notes

- 1) The rates Included in this D.S.R. are applicable for all Divisions and Sub Divisions under P. W. D. and Z. P. Maharashtra State. For work executed semi Government and Private establishments the rate shall be twice as mentioned in the DSR as per the Government in P.W. D. Guidelines Issued vide Circular No- Lab-1097/34/ NH-2 dated 15.10.1997 Mantralay, Mumbai 400032. (i.e. twice the rate mentioned in D. S. R.)
- 2) The field Officer will have to strictly adhere to the test frequency stipulated as per Government guideline.
- 3) In order to achieve uniformity in testing of material throughout Maharashtra State, tests have been classified as per requirement.

GOVERNMENT OF MAHARASHTRA
Vigilance & Quality Control Circle

Schedule of Testing charges for construction material used for
Government Works for the Year 2020-21

Effective from 1/ 07/2020 and valid Upto 30/06/2021

Sr. No.	Name of Test	Test	Rate in Rs.
1	2	3	4
	BASIC TEST OF CEMENT.		
1	Standard Consistency, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	1 Test	3550.00
	BASIC TEST OF AGGREGATE.		
2	Water Absorption, Specific Gravity, Impact Value, Crushing Value.	1 Test	2450.00
3	Sieve Analysis.	1 Test	650.00
4	Abrasion Value.	1 Test	1100.00
5	Flakiness Index & Elongation Index.	1 Test	800.00
6	Stripping Value. (for Bituminous Work)	1 Test	700.00
7	Soundness.	1 Test	2350.00
	MIX DESIGN.		
8	GSB Mix Design./Cement Treated Sub Base (CTSB)	1 Test	15300.00
9	Wet Mix Macadam Mix Design.	1 Test	15300.00
	FINE AGGREGATE.		
10	Fineness Modulus (Sieve Analysis), Silt & Clay Content	1 Test	1300.00
11	Chloride & Sulphate Content.	1 Test	750.00
12	Silt Factor.	1 Test	800.00
	BRICKS		
13	Water Absorption (Set of 5 Bricks), Compressive Strength (Set of 5 Bricks), Efflorescence (Set of 5 Bricks).	1 Test	2050.00
	FLOORING TILES (MOSSAIC / CEMENT)		
14	Flexural test (Set of 6 Tiles), Water Absorption (Set of 6 Tiles). Resistance to wear (Set of 6 Tiles).	1 Test	2350.00
15	Flooring of Natural Stone (Kota, Marble, Granite, Tandur. etc.) Water absorption, Specific gravity	1 Test	1300.00
	CERAMIC TILES / VITRIFIED TILES		
16	Water Absorption, Modulus of Rupture (Set of 6 Tiles)	1 Test	1500.00
	MANGLORE TILES		
17	Water Absorption (Set of 6 Tiles), Flexural test (Set of 6 Tiles).	1 Test	1400.00
18	Permeability.	1 Test	900

	CONCRETE		
19	Compressive Strength OF C.C. Cube (Set of 3 cubes).	1 Test	650.00
20	Concrete Mix Design (With all Tests on basic materials)	1 Test	12950.00
21	Flexural strength of Beam.	1 Test	700.00
22	Permeability Test.	1 Test	1450.00
23	Concrete mix design by Accelerated curing method. (By Accelerated curing method)	1 Mix Design	15300.00
24	Taking of core samples in concrete pavement. (Excluding Dead Journey Charges)	1 Test	2700.00
25	Dead Journey Charges.	Per Km	16.00
	CONCRETE PAVING BLOCKS		
26	Compressive Strength , Water Absorption,(Set of 8 Blocks)	1 Test	2350.00
	MORTOR		
27	Compressive Strength.(Set of 3 Cubes)	1 Test	650.00
	STONE/ RUBBLE		
28	Crushing Value/Compressive Strength, Water Absorption & Specific Gravity,	1 Test	1900.00
	SOIL / MURUM		
29	Sieve Analysis.	1 Test	650.00
30	Liquid limit & plastic Limit.	1 Test	1100.00
31	Compaction Test (Proctor Density).	1 Test	1750.00
32	C.B.R. Test (Lab) With compaction test.	1 Test	6500.00
33	C.B.R. Test (Field Determination Test) Excluding Transportation.As per IS 2720 Part XXXI	1 Test	2450.00
34	Dead Journey Charges of inspection Vehical	Per Km	16.00
35	Dead Journey Charges of Truck/Tipper	Per Km	58.00
36	Field Density by Sand replacement method.	1 Test	1050.00
37	Sulphate & Chloride Contents.	1 Test	750.00
38	Mechanical Analysis.	1 Test	2100.00
39	Plate Load Bearing Test. (Excluding Transportation)	1 Test	29400.00
40	Free Swell Test for Soil.	1 Test	850.00
	BITUMEN		
41	Penetration, Softening Point, Flash & Fire Point, Specific Gravity	1 Test	2950.00
42	Viscosity.	1 Test	1800.00
43	Ducility / Elastic Recovery	1 Test	850.00

44	Extraction Test.(Bituminous mix)	1 Test	1500.00
45	Extraction & Sieve Analysis of Bituminous mix (for BM/DBM/AC) (2 samples of extraction for one sieve analysis including extraction)	1 Test	3700.00
46	Marshall Stability & Flow measurement.(Set of 3 moulds)	1 Test	1050.00
47	Job Mix Design with all Tests on aggregate (Excluding bitumen) for DBM/SDBC/AC/SMA (Stone Mastic Asphalt) (Testing of Bitumen shall be seperately Charged)	1 Mix Design	15300.00
48	B. M. Mix Design with all Tests on aggregate (Excluding bitumen) (Testing of Bitumen shall be seperately Charged)	1 Mix Design	7050.00
49	Mastic Hardness No.	1 Test	650.00
50	Thin film oven test & test on residue of modified bitumen.	1 Test	2950.00
51	Seperation test for modified bitumen.	1 Test	1050.00
52	Density of Bituminous Core.	1 Test	600.00
53	Taking of core samples in bituminous flexible pavement. (Excluding Dead Journey Charges)	1 Test	2700.00
54	Dead Journey Charges.	Per Km	16.00
	BITUMINOUS EMULSION		
55	% Residue Test By Evaporation / Sieve Test	1 Test	600.00
56	Partical Charge Test	1 Test	400.00
	HOLLOW / SOLID / AAC BLOCKS		
57	Density Test . (Set of 3 Blocks),Compressive Strength. (Set of 3 Blocks),Water Absorption Test (Set of 3 Blocks)	1 Test	1850.00
	WATER		
58	PH Value, Sulphate & Chloride Content.	1 Test	1050.00
	WOOD		
59	Density, Moisture Content.	1 Test	1000.00
	FLUSH DOOR		
60	Knife Test, Adhesion Test, End Immersion Test.	1 Test	2550.00
	PLYWOOD		
61	Determination of Resistance to dry heat,Determination of Moisture Content,Determination of Density,Thickness of Plywood.	1 Test	3200.00
62	Test for Glue Adhesion	1 Test	500.00
	PARTICAL BOARD		
63	Determination of Moisture Content,Determination of Density	1 Test	1500.00
	ALUMINIUM SECTION		

64	Thickness, Mass Per Running meter,	1 Test	650.00
65	Test on Powder Coating	1 Test	750.00
	A.C. PIPES		
66	Water Absorption	1 Test	650.00
67	Bursting Strength	1 Test	500.00
	G.I. PIPES		
68	Weight per running meter,Diameter of pipe & wall thickness of pipe,	1 Test	250.00
69	Weight of Zinc coating per sq. m.	1 Test	300.00
	P.V.C. PIPES (NONPLASTISIZED)		
70	Weight per running meter,Diameter of pipe & wall thickness of pipe	1 Test	250.00
	STEEL ANTI CORROSIVE TEST		
71	Resistance to applied Voltage. (1 Hr. Test) (Set of 2 Bars)	1 Test	1050.00
72	Resistance to applied Voltage.(30 Days Test) (Set of 2 Bars)	1 Test	2950.00
73	Thickness of Coating. (Set of 2 Bars)	1 Test	550.00
74	Chemical Resistance Test.(Set of 8 Bars)	1 Test	2250.00
75	Hardness of Coating Test .	1 Test	300.00
76	Salt Spray Test (4 Cycles) (Set of 2 Bars)	1 Test	1400.00
	STEEL BAR TESTING		
77	Upto 16 mm (Set of 3 Bars)	1 Test	1200.00
78	Above 16 mm (Set of 3 Bars) (Tensile strength, %, Elongation, Yield Stress,Weight-Per Meter, Bend / Rebend Test, Proof Stress.)	1 Test	1500.00
79	Nitrol Solution Test. (Set of 3 Bars)	1 Test	3650.00
	PAINT / THERMO-PLASTIC PAINT		
80	Glass bead contents & grading analysis.	1 Test	3650.00
81	Reflectance & yellowness index.	1 Test	1050.00
82	Flowability.(Percentage residue).	1 Test	1050.00
83	Softening Point. (Ring & ball method).	1 Test	950.00
84	Drying Time.	1 Test	750.00
	COAL TAR EPOXY PAINT		
85	Drying Time.	1 Test	750.00
86	Dry Film Thickness.	1 Test	700.00
87	Flexibility.	1 Test	300.00
88	Gel Time.	1 Test	500.00
89	Pot Life.	1 Test	500.00
90	Volume of Solid.	1 Test	1000.00
	ROAD SIGN BOARD		
91	Retro Reflective Test.	1 Test	3750.00
	ROUGHNESS INDEX / ROAD UN-EVENNESS TEST		
92	Road Surface Single Lane.(3.70 to 5.50 m)	Per Km	700.00
93	Road Surface 1.5 Lane to Two Lane. (5.50 to 7.00 m)	Per Km	1400.00

94	Each Additional Lane.	Per Km	700.00
95	Dead Journey Charges.	Per Km	16.00
	OVERLAY DESIGN		
96	Benkelman Beam Test (Excluding Dead Journey Charges)	Per Km	13300.00
	NON -DESTRUCTIVE TEST		
97	Rebound Hammer Test.	1 Point	250.00
98	Ultrasonic Pulse Velocity	1 Point	350.00

Superintending Engineer
Vigilance & Quality Control Circle,
Pune-411 001

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मुख्य अभियंता

सा.बां. प्रादेशिक विभाग, मध्यवर्ती इमारत, पुणे यांचे कार्यालय

दुरध्वनी :- ०२० २६१२४२९५ E-Mail:- pune.ce@mahapwd.com Fax No:- ०२० २६१२६२६८

जा.क्र. मुअपु/का-२/ इमारती-२ / ५९४० / २०१७,

दिनांक - १७.१०.२०१७

परिपत्रक

विषय :- शासकीय बांधकामांमध्ये कृत्रिम वाळू (Crushed sand /Artificial Sand) चा वापर करणेबाबत.

संदर्भ :- १.शासन परिपत्रक क्रमांक - संकिर्ण - २००९ / प्र. क्र. १० / रस्ते-१, दि. २३/०७/२००९
२. या कार्यालयाचे परिपत्रक जा.क्र.का-२/नियोजन/१५०४/२०१३ . दि.८/३/२०१३

सार्वजनिक बांधकाम विभागामार्फत मोठ्या प्रमाणात शासकीय इमारतींची बांधकामे तसेच रस्ते व पूलांची बांधकामे हाती घेण्यात येतात. सदर बांधकामातील काँक्रीटच्या बाबींचे परिमाणेही खुप जास्त असतात. त्यामुळे काँक्रीटच्या घटक भागाचे म्हणजेच या प्रकरणी मुख्यत्वे वाळूच्या मागणी मध्ये प्रचंड प्रमाणात वाढ झाली आहे. बांधकामांसाठी लागणा-या वाळूची मागणी ही उपलब्ध नैसर्गिक वाळूच्या व्यस्त प्रमाणात वाढते आहे. परिणामी वाळूचे बेकायदा उत्खनन वाढून नदी व नाल्यांच्या नैसर्गिक प्रवाहात बाधा पाहोचविण्याचे प्रकार वाढले आहेत. अशा परिस्थितीत नैसर्गिक वाळूचा बांधकामातील वापर कमी करून त्याऐवजी कृत्रिम वाळूचा वापर वाढविणे क्रमप्राप्त असून काळाची गरज आहे.

शासनाच्या दि. २३/०७/२००९ रोजीच्या परिपत्रकान्वये कृत्रिम वाळूच्या वापराच्या अनुषंगाने मार्गदर्शक सुचना निर्गमित केल्या आहेत. त्यास अनुसरून या कार्यालयाच्या दि.८/३/२०१३ रोजीच्या परिपत्रकान्वये क्षेत्रिय कार्यालयांसाठी मार्गदर्शक सुचना निर्गमित केल्या आहेत.

तथापि, आता क्षेत्रिय स्तरावर उपलब्ध यंत्रसामुग्री, त्या अनुषंगाने उपलब्ध होऊ शकणारी कृत्रिम वाळू व त्याची गुणवत्ता विषयक मानके तसेच कृत्रिम वाळूच्या वापरासंदर्भात दक्षता व गुणनियंत्रण मंडळाकडून प्राप्त झालेले अभिप्राय इत्यादींचा विचार करता, नव्याने प्रस्तावित शासकीय बांधकामांमध्ये कृत्रिम वाळूच्या वापरा संदर्भात नव्याने मार्गदर्शक सूचना निर्गमित करणे आवश्यक झाले आहे.

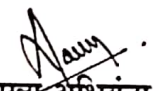
उपरोक्त अनुषंगाने शासकीय बांधकामांमध्ये नैसर्गिक वाळू ऐवजी १०० % कृत्रिम वाळू (Crushed sand / Artificial Sand) वापरण्यास या परिपत्रकान्वये परवानगी देण्यात येत असून, त्याप्रमाणे कृत्रिम वाळू वापरताना खालील नमूद अटीचे पालन होणे अनिवार्य आहे.

१. बांधकामासाठी वापरात येणारी कृत्रिम वाळू ही IS ३८३ : २०१६ मधील खंड ३.१.२ मध्ये नमूद कृत्रिम वाळूच्या व्याख्येनुसार Automatic Vertical Shaft Impactor या मशिन मधुन चांगल्या प्रतिचा खाणीचा दगड भरडुन उत्पादित केलेली असावी.
२. संबंधीत क्षेत्रिय अधिकारी यांनी प्रचलित IS Code ३८३ - २०१६ मधील तक्ता क्र. ९ मध्ये नमूद केले प्रमाणे fine aggregate चे स्विकृती बाबतच्या ग्रेडींग झोन नुसार वर्गीकरण करून व तशा पध्दतीच्या तपासण्या प्रत्यक्ष बांधकामाच्या जागेवर घेतल्यानंतरच कृत्रिम वाळू वापरण्यास परवानगी देण्यात यावी.

३. बांधकाम सुरु करण्यापूर्वी कृत्रिम वाळूच्या स्रोतास (Source of Crushed sand/Artificial sand) कार्यकारी अभियंता यांनी लिखित स्वरूपात मान्यता देणे बंधनकारक राहिल.
४. कृत्रिम वाळूचा वापर करणेपूर्वी अन्य आवश्यक चाचण्यांसह काँक्रीटकरिता चे Mix Design शासकीय प्रयोगशाळेतूनच करून घेणे अनिवार्य राहिल.
५. Prestressed Concrete च्या बाबींमध्ये कृत्रिम वाळूचा वापर करण्यात येऊ नये.
६. बांधकामाच्या काँक्रीटच्या बाबीं करिता Ready Mix Concrete चा वापर टाळणे अनिवार्य आहे.
७. कृत्रिम वाळूचा वापर बांधकामामध्ये करताना कृत्रिम वाळूच्या वापरा बाबतचे विनिर्देश सोबत Annexure-I स्वतंत्रपणे या परिपत्रकासोबत जोडण्यात येत आहेत. त्यानुसार त्या कामाच्या निविदेमध्ये Additional General Specification चा अंतर्भाव करण्यात यावा.
८. सद्यस्थितीत प्रगतीपथावर असलेल्या बांधकामांमध्ये कृत्रिम वाळूचा वापर करणे अनिवार्य झाल्यास या बाबत तांत्रिक मान्यता प्रदान करणा-या सक्षम प्राधिकारी यांना अवगत करण्यात यावी.
९. कृत्रिम वाळूचा वापराबाबत वरील नमूद १ ते ६ अटीचे तंतोतंत पालन करण्यात यावे. तसेच कृत्रिम वाळू वापरल्यास आरसीसी कामास विहित प्रमाणापेक्षा जास्त सिमेंट लागल्यास त्याकरिता संबंधीत ठेकेदारास अतिरिक्त मोबदला देण्यात येणार नाही.
१०. नैसर्गिक वाळू ऐवजी कृत्रिम वाळूचा वापर ज्या बाबींसाठी प्रस्तावित करण्यात येईल अशा बाबींसाठीच्या कमी दराबाबत अंदाजपत्रकानुसार दोन्ही साहित्यांच्या बेसिक दर व साहित्यांचे वाहतुकीचे अंतर विचारात घेऊन संबंधीत क्षेत्रिय अधिकारी यांनी उचित कार्यवाही करावी. तसेच कामावर होणा-या एकंदर खर्च विहित मर्यादेपेक्षा जास्त होणार नाही याची दक्षता संबंधीत क्षेत्रिय अधिकारी यांनी घेण्यात यावी.

सहपत्र- Annexure I

स्थळ प्रतीवर मा.मु.अ.यांची स्वाक्षरी असे.


 मुख्य अभियंता
 सा.बां.प्रादेशिक विभाग
 पुणे करिता
 Boc
 Vaiter

- प्रत:- अधीक्षक अभियंता, दक्षता व गुण नियंत्रण मंडळ, पुणे, माहिती साठी पुढील उचित कार्यवाही साठी.
- प्रत:- अधीक्षक अभियंता, सा.बां.मंडळ, पुणे, सातारा, कोल्हापूर, सोलापूर यांना माहिती साठी पुढील उचित कार्यवाही साठी.
- प्रत:- कार्यकारी अभियंता, सा.बां.विभाग पुणे, सा.बां.पूर्व/उत्तर/दक्षिण/इमारती विभाग, पुणे
 कार्यकारी अभियंता, सा.बां.विभाग सातारा/सा.बां.पश्चिम विभाग, सातारा
 कार्यकारी अभियंता, सा.बां.विभाग, कोल्हापूर /सा.बां.विभाग (दक्षिण) विभाग, कोल्हापूर/ विशेष प्रकल्प (सा.बां) विभाग, कोल्हापूर / सा.बां.विभाग विभाग, मिरज/ सा.बां.विभाग (पश्चिम) विभाग, सांगली, कार्यकारी अभियंता, सा.बां.विभाग क्र.१ /क्र.२, सोलापूर/सा.बां.विभाग, अकलूज/ सा.बां.विभाग, पंढरपूर यांना माहिती साठी व आवश्यक कार्यवाही साठी रवाना.
- प्रत:- सहा.मुख्य अभियंता (रस्ते/इमारती) यांना माहिती साठी व आवश्यक कार्यवाहीसाठी.
- प्रत:- उप अभियंता रस्ते /नाबार्ड/इमारती-१ /इमारती-२ यांना माहितीसाठी व उचित कार्यवाहीसाठी.
- प्रत:- निविदा विभाग, सा.बां.प्रादेशिक विभाग, पुणे यांना माहितीसाठी व पुढील आवश्यक कार्यवाहीसाठी.

"Annexure- I"

**Additional Specifications to be included in General Conditions of Contract
for use of VSI Crushed Sand / Artificial Sand/ Fine Aggregates.**

1. VSI Crushed sand / Artificially manufactured sand / fine aggregates hereinafter referred to as "Crushed Sand" shall be as defined under Cl.3.1.2 of IS 383-2016.
2. The properties of "Crushed Sand" shall confirm to the provisions of IS 383:2016.
3. The "Crushed Sand" shall be free of dust and other Deleterious material.
4. The "Crushed Sand" shall be manufactured using "Automatic Vertical Shaft Impactor "type Crusher only.
5. The quantity of Microfines (Particles below 75 microns) in "Crushed Sand" shall not be more than 7 %.
6. The Contractor shall intimate the Engineer In-Charge regarding the source of supply of "crushed sand". The source of supply of "crushed sand" shall be got approved by the Executive Engineer (Engineer-In-charge) prior to the start of work.
7. Each Load of crushed sand whenever brought on site shall be tested for "Fineness modulus". Fineness modulus shall be within permissible limits, If it doesn't fall within acceptable limits, it shall be rejected.
8. The Test of Compressive strength of concrete / Mortar using "Crushed sand" shall be carried out in presence of Department's Engineer as given below...
 - a) 100 % Cube testing in presence of Junior /Asst./Sectional Engineer.
 - b) 25 % Cube testing in the presence of sub divisional Engineer
 - c) 5 % Cube testing in the presence of Executive Engineer. (Engineer-In-charge)
9. The flakiness index and elongation index tests shall be within permissible limits.
10. The Concrete mix design for each grade of concrete using "Crushed sand" shall be carried out only in Government Quality Control laboratory and the same Mix Design shall be adopted.
11. As far as possible freshly produced "Crushed sand" shall be used. Stored "Crushed sand " shall not be used.
12. For Plastering purpose, if the use of crushed sand is proposed, it shall be used with addition of super plasticisers at the rate of 100ml/bag of cement without any extra cost to Government .

13. The following tests shall be carried out for the use of "Crushed sand".

- a) Sieve analysis
- b) Specific gravity
- c) Water absorption
- d) Bulk density
- e) Alkali aggregate reaction
- f) Soundness
- g) Deleterious Material
- h) Organic impurities
- i) Micro fines Content
- j) Test for silt and clay.
- k) Fineness Modulus test.

14. Necessary Bond regarding the use of "Crushed sand" shall be submitted by the Contractor clearly stating that, if any defects are observed during execution and in defect liability period, the same shall be rectified at his own risk and cost.

15. Grading zone I and II mentioned under Clause 6.3 table 9 of fine aggregates in IS 383:2016 shall only be used for concreting.

16. Reversible drum type / Batch mix plant(pan type) concrete mixer shall be used for concrete.

15. Use of Concrete from Ready Mix Plant (RMC) shall be strictly Prohibited.

16. "Crushed sand" shall not be used for prestressed concrete works.



मुख्य अभियंता

सा.बां. प्रादेशिक विभाग, मध्यवर्ती इमारत, पुणे यांचे कार्यालय

दुरध्वनी :- ०२० २६१२४२९५ E-Mail:- pune.ce@mahapwd.com Fax No:- ०२० २६१२६२६८

जा.क्र. मुअपु/का-२/ इमारती-२ / ७२१३ / २०१७, दिनांक - २२/१२/२०१७

शुद्धिपत्रक

विषय :- शासकीय बांधकामांमध्ये कृत्रिम वाळू (Crushed sand /Artificial Sand) चा वापर करणेबाबत.

संदर्भ :- १. शासन परिपत्रक क्रमांक - संकिर्ण - २००९ / प्र. क्र. १० / रस्ते-१, दि. २३/०७/२००९
२. या कार्यालयाचे परिपत्रक जा.क्र.का-२/नियोजन/१५०४/२०१३ . दि.८/३/२०१३
३. या कार्यालयाचे परिपत्रक जा.क्र. मुअपु/का-२/ इमारती-२ / ५९४० / २०१७, दिनांक - १७.१०.२०१७.

उपरोक्त संदर्भ पत्र ३ अन्वये विषयांकित शासकीय बांधकामांमध्ये कृत्रिम वाळू (Crushed sand /Artificial Sand) चा वापर करणेबाबत या कार्यालयामार्फत परिपत्रक काढण्यात आलेले आहे.

या परिपत्रकासोबत बांधकामामध्ये कृत्रिम वाळू (Crushed sand /Artificial Sand) चा वापर करणे बाबतचे विनिर्देश त्या कामाच्या निविदेमध्ये Additional Specification मध्ये अंतर्भूत करणे बाबत स्वतंत्र "Annexure-I" जोडण्यात आलेले आहे.

सदर "Annexure-I" मधील मुद्दा क्रमांक १६ मध्ये यापूर्वी "Crushed sand" shall not be used for prestressed concrete works. असे नमूद करण्यात आले आहे. या बाबत सदर शुद्धिपत्रकान्वये खालील प्रमाणे सुधारणा करण्यात येत आहे.

16. "Manufactured aggregates" shall not be permitted for prestressed concrete works.

(Signature)
मुख्य अभियंता

सा.बां.प्रादेशिक विभाग
पुणे.करिता

स्थळप्रतीवर मा.मु.अ.यांची स्वाक्षरी असे

प्रत:- मा.सचिव (बांधकामे), सा.बां.विभाग, मंत्रालय, मुंबई यांना वरील संदर्भ पत्रांच्या छायांकित प्रतींसह माहिती साठी .

प्रत:- अधीक्षक अभियंता, दक्षता व गुण नियंत्रण मंडळ, पुणे, माहिती साठी पुढील उचित कार्यवाही साठी.

प्रत:- अधीक्षक अभियंता, सा.बां.मंडळ, पुणे, सातारा, कोल्हापूर, सोलापूर यांना माहिती साठी पुढील उचित कार्यवाही साठी.

महाराष्ट्र शासन सार्वजनिक बांधकाम प्रादेशिक विभाग नागपूर मुख्य अभियंता सा.बां.प्रादेशिक विभाग, नागपूर यांचे कार्यालय, बांधकाम संकुल सिव्हील लाईन्स, नागपूर-४४०००१ (टे.नं.२५६२९८६) (फॅक्स क्र. २५६५९८३) E-Mail-nagpur.ce.@ mahapwd.com	
क्रमांक : का-इमा-१/ कृत्रिम वाळू / ४३५	दिनांक : 15 JAN 2019

परिपत्रक क्र. - ३६

विषय :- रस्ते, पूल व इमारतीच्या बांधकामातील कांक्रिट च्या बाबी मध्ये नैसर्गिक वाळू ऐवजी कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed sand) वापरण्याची परवानगी देणे बाबत

संदर्भ: १. या कार्यालयाचे पत्र क्र. इमा-१ /कृत्रिमवाळू/१०६८७/ ०१.१२.२०१८
२. शासन पत्र क्र. संकिर्ण-२००९/ प्र.क्र. १०/रस्ते-१ दि, २३.७.२००९

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१. वर्ष २०१८-१९ च्या राज्यस्तरीय दरसुची मध्ये नैसर्गिक वाळू शिवाय कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed Sand) वापरण्याचा कांक्रिटच्या बाबी मध्ये समावेश करण्यात आला आहे व या अनुषंगाने अधीक्षक अभियंता, सा.बां.मंडळ चंद्रपूर यांनी मागणी केल्याप्रमाणे या कार्यालयाचे संदर्भित पत्र क्र. १ अन्वये सा.बां.विभाग वर्धा अंतर्गतच्या एका कामाकरीता काही अटीच्या अधिन राहून कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed Sand) वापरण्याची परवानगी देण्यात आलेली आहे.
२. आता अनेक कंत्राटदाराकडून कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed Sand) वापरण्याची मागणी करण्यात येत आहे.
३. सबब, सदर मागणीच्या अनुषंगाने बांधकामातील कांक्रिट च्या बाबी मध्ये नैसर्गिक वाळू ऐवजी कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed sand) वापरण्याची सा.बां. प्रादेशिक विभाग नागपूर अंतर्गतच्या कामावर खालील अटीच्या अधीन राहून परवानगी देण्यात येत आहे.

A. कंत्राटदारास परवानगी देणे:

- i. कृत्रिम वाळू वापरण्याची परवानगी करीता संबंधीत कंत्राटदाराने कार्यकारी अभियंता यांचे कडे विनंती करावी. त्यानंतर कार्यकारी अभियंता यांनी स्वतः कृत्रिम वाळू च्या Manufacturing Unit चे निरीक्षण करावे. तसेच वापरण्यात येणा-या दगडाचे निरीक्षण करून तयार होणारी कृत्रिम वाळू मानकाप्रमाणेच असेल याची खात्री करावी.
- ii. निरीक्षणानंतर कृत्रिम वाळू Automatic Vertical Shaft Impactor मशीन द्वारा तयार करण्यात येत आहे तसेच Washing Unit असल्याची खात्री करावी. V.S.I. मशीन द्वारा निर्मित कृत्रिम वाळूस परवानगी द्यावी.

- iii. परवानगी देण्यापूर्वी संबंधीत कार्यकारी अभियंता यांनी प्लांट व दगडाचा निरीक्षण अहवाल अभिलेखावर ठेवावा.
- iv. इमारतीचे plaster व Prestressed Concrete मध्ये कृत्रिम वाळू वापरण्यास परवानगी देवू नये.
- v. सोबतच्या Annexure -1 मधील Additional Specifications प्रमाणे व खालील परिच्छेद B. iv ला सहमत असल्याबाबतचे बंधपत्र सदर कंत्राटदाराकडून काम सुरु करण्यापूर्वी घेण्यात यावे.
- vi. सद्यःस्थितीत प्रगतीपथावर असलेल्या बांधकामांमध्ये कृत्रिम वाळूचा वापर करणे अनिवार्य झाल्यास याबाबत तांत्रिक मान्यता प्रदान करणा-या सक्षम प्राधिकारी यांना अवगत करण्यात यावे.

B. प्रत्यक्ष काम करतांना घ्यावयाची काळजी:

- i. कृत्रिम वाळूचा वापर करणेपूर्वी अन्य आवश्यक चाचण्यांसह कॉन्क्रीटकरीता चे Mix Design शासकीय प्रयोगशाळेतूनच करून घेणे अनिवार्य राहिल.
- ii. कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed sand) मानकाप्रमाणे तसेच सहपत्रामधील दिलेल्या चाचण्याप्रमाणे आहे कि नाही हे तपासण्याची प्राथमिक जबाबदारी कार्यकारी अभियंता यांची राहिल. या करीता कार्यकारी अभियंता व उपविभागीय अभियंता यांनी खालील प्रमाणे स्वतः साहित्याची तपासणी करावी.
 - कार्यकारी अभियंता यांनी करावयाची कार्यवाही:
 - a) सदर कृत्रिम वाळू वापरणे सुरु झाल्यानंतर सुरुवातीचे ७ दिवस कार्यकारी अभियंता यांनी कृत्रिम वाळूचे दोन नमुने स्वतः तपासावेत.
 - b) त्या पुढील ३० दिवस, ७ दिवसात एक नमुना या प्रमाणे वाळूची तपासणी करावी.
 - c) त्यापुढे प्रत्येक १५ दिवसात एक नमुन्याची तपासणी करावी.
 - उपविभागीय अभियंता यांनी करावयाची कार्यवाही:
 - a) सदर कृत्रिम वाळू वापरणे सुरु झाल्यानंतर सुरुवातीचे ७ दिवस उपविभागीय अभियंता यांनी कृत्रिम वाळूचे दररोज एक नमुना स्वतः तपासावा.
 - b) त्या पुढील ३० दिवस, ७ दिवसात दोन नमुना या प्रमाणे वाळूची तपासणी करावी.
 - c) त्यापुढे प्रत्येक १५ दिवसात दोन नमुन्याची तपासणी करावी.
- iii. उपविभागीय अभियंता यांनी randomly RMC plant चे inspection करावे. तेथे कृत्रिम वाळूच्या ऐवजी Stone Dust वा इतर तत्सम साहित्याचा वापर करण्यात येत तर नाही ना याची पाहणी करावी.
- iv. एखाद्या प्रकरणात Stone Dust वापरण्यात येत असल्याचे निदर्शनास आल्यास, संबंधीत कंत्राटदारावर पेनल्टी म्हणून सदर Plant वरून वापरण्यात आलेल्या त्यापूर्वीच्या कार्यान्वित केलेल्या कांक्रीटच्या परिमाणाचे (Quantity) देयक देवू नये.

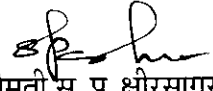
C. देयकाबाबत:

- i. प्रगतीतील कामांमध्ये कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed sand) वापरा करिता कोणतेही अतिरिक्त दर देण्यात येवू नये.
- ii. कृत्रिम वाळू वापरल्यास कांक्रीट मध्ये विहीत प्रमाणापेक्षा जास्त सिमेंट लागल्यास त्याकरीता संबंधीत ठेकेदारास अतिरिक्त मोबदला देण्यात येवू नये.
- iii. काम पुर्ण झाल्यानंतर कार्यकारी अभियंता यांनी कृत्रिम वाळूच्या वापराबाबतचा सर्वेकश अहवाल या कार्यालयास सादर करावा.

४. या पुढील तयार करण्यात येणा-या अंदाजपत्रकांमध्ये नैसर्गिक वाळू ऐवजी कृत्रिम वाळूच्या वापर प्रस्तावित करण्यापूर्वी दोन्ही साहित्यांच्या बेसिक दर व साहित्याचे वाहतुकीचे अंतर विचारात घेऊन संबंधीत क्षेत्रिय अधिकारी यांनी उचित निर्णय घ्यावा.
५. तसेच या कृत्रिम वाळू वापरावयाच्या अनुषंगाने आवश्यक Clauses या पुढील निविदा पत्रामध्ये ठेवावेत. ही जबाबदारी कार्यकारी अभियंता यांची राहिल.
६. कृत्रिम वाळू (Artificial sand/ V.S.I. Crushed sand) म्हणजे Stone Crusher मधून निघालेली Stone Dust नसून Automatic Vertical Shaft Impactor मशीन द्वारा चांगल्या प्रतिका दगडाला भरडून तयार झाल्यानंतर Washing Unit मधून निघालेली I.S.Code 383-2016 या माणकाप्रमाणे असलेली कृत्रिम वाळू आहे याची कंत्राटदारांसह सा.बां.विभागातील सर्व अभियंत्यांनी नोंद घ्यावी

सहपत्र :- Annexure -1

मूळ प्रत मु.अ.द्वारा मंजूर


(श्रीमती सु. प्र. क्षीरसागर)
सहा.मुख्य अभियंता (इमा.)

- प्रतिलिपी :- १. अधीक्षक अभियंता, दक्षता व गुण नियंत्रण मंडळ, नागपूर यांना माहितीसाठी करिता
२. अधीक्षक अभियंता, सा.बां.मंडळ, नागपूर/चंद्रपूर/गडचिरोली यांना माहितीस व उचित कार्यवाहीस अग्रेषित.
 ३. कार्यकारी अभियंता (प्रादेशिक विभागातील सर्व) यांना माहिती व उचित कार्यवाही करिता अग्रेषित
 ४. सहा. मुख्य अभियंता (रस्ते / इमारती) यांना माहितीसाठी व आवश्यक कार्यवाहीसाठी.
 ५. उपविभागीय अभियंता / शाखा अभियंता (प्रादेशिक विभागातील सर्व) यांना माहिती व उचित कार्यवाही करिता अग्रेषित
 ६. मु. अ. कार्यालयातील कार्यासन - रस्ते १/२/३/४/५/६ /इमा १/२/३ / प्र.आ. यांना माहिती करिता.

“ Annexure-I ”

Additional Specifications to be included in General Conditions of Contract for use of VSI Crushed Sand / Artificial Sand / Fine Aggregates.

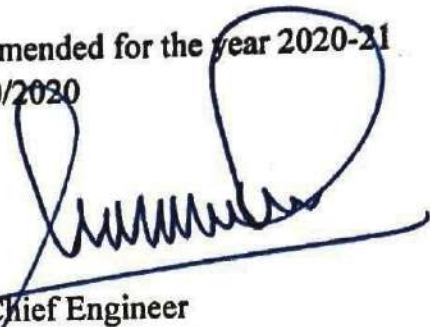
1. VSI Crushed Sand / Artificially manufactured sand / fine aggregates hereinafter referred to as “Crushed Sand” shall be as defined under CL. 3.1.2 of IS 383-2016.
2. The properties of “Crushed Sand” shall conform to the provisions of IS 383-2016.
3. The “Crushed Sand” shall be free of dust and other deleterious material.
4. The “Crushed Sand” shall be manufactured using “Automatic Vertical Shaft impactor” type Crusher only.
5. The quantity of Microfines (Particles below 75 microns) in “Crushed Sand” shall not be more than 7 %
6. The Contractor shall intimate the Engineer In-Charge regarding the source of supply of “Crushed Sand”. The source of supply of “Crushed Sand” shall be got approved by the Executive Engineer (Engineer-In-charge) prior to the start of work.
7. Each Load of crushed sand whenever brought on site shall be tested for “Fineness modulus”. Fineness modulus shall be within permissible limits. If it doesn't fall within acceptable limits, it shall be rejected.
8. The Test of Compressive strength of concrete / Mortar using “Crushed sand” shall be carried out in presence of Department's Engineer as given below.
 - a) 100 % Cube testing in presence of Junior / Asstt. / Sectional Engineer
 - b) 25 % Cube testing in the presence of sub divisional Engineer
 - c) 5 % Cube testing in the presence of Executive Engineer (Engineer-In-charge)
9. The flakiness index and elongation index tests shall be within permissible limits.
10. The Concrete mix design for each grade of concrete using “Crushed sand” shall be carried out only in Government Quality Control laboratory and the same Mix Design shall be adopted.
11. As far as possible freshly produced “Crushed Sand” shall be used stored “Crushed sand” shall not be used.

12. For Plastering purpose, if the use of crushed sand is proposed it shall be used with addition of super plasticisers at the rate of 100 ml / Bag of Cement without extra cost to Government. Separate permission shall be taken for use in plastering from concerned Executive Engineer.
13. The following tests shall be carried out for the use of "Crushed sand"
- a) Sieve analysis
 - b) Specific gravity
 - c) Water absorption
 - d) Bulk density
 - e) Alkali aggregate reaction
 - f) Soundness
 - g) Deleterious Material
 - h) Organic impurities
 - i) Micro fines content
 - j) Test for silt and clay
 - k) Fineness Modulus test.
14. Necessary Bond regarding the use of "Crushed sand" shall be submitted by the Contractor clearly stating that, if any defects are observed during execution and defect liability period, the same shall be rectified at his own risk and cost.
15. Grading zone II mentioned under Clause 6.3 table 9 of fine aggregates is IS 383:2016 shall only be used for concreting.
16. Reversible drum type / Batch mix plant (pan type) concrete mixer shall be used for concrete.
17. "Crushed sand" shall not be used for prestressed concrete works.

PUBLIC WORKS DEPARTMENT

The State Schedule of Rates is recommended for the year 2020-21
with effect from 01/10/2020


Chief Engineer
Public Works Region
Mumbai

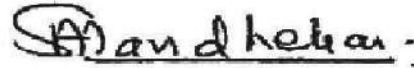

Chief Engineer
Public Works Region
Pune


Chief Engineer
Public Works Region
Aurangabad


Chief Engineer
Public Works Region
Nashik


Chief Engineer
Public Works Region
Amravati


Chief Engineer
Public Works Region
Nagpur


Chief Engineer
Public Work Region
Mumbai.

Approved

Secretary (Works)

Secretary (Roads)

Govt. of Maharashtra Public Works Department

